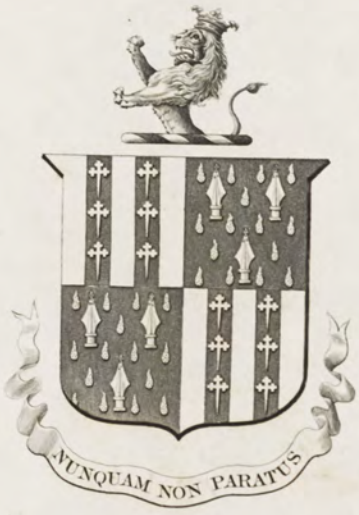
JOHN P. BETTON



Thos Forrest Betton.

Senator Pabst
Other Officers
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51506

Benj. Rush.

Pathology

Gentlemen

Hitherto we have considered the living body in a healthy state; such as divines considered man before his fall; but now we will consider him in an imperfect or diseased state, Sickness & death as a moral evil are the consequences of the forfeiture of primoval innocence, which as soon as lost was followed by these effects. Every element in nature took a part with the Creator & conspired with him against man. Their action at first however was feeble & slow, as we find by the age of some who almost reach'd 1000 years & it was not till after the deluge that the life of man was protracted to the present age; the influence of which together with the atmosphere conspired to produce. That Life in a forced state is no less consonant to religion, than to true Philosophy. Life consists in a strife or a temporry victory over causes which tend to induce death. Let us not suppose that the creator delights in the mysery of his creatures, so far as this being the case all diseases are blessings in disguise. They are necessary to our general good and happiness, they are of important uses.

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they naturally lead us to the study of subjects highly important to the human race, diseases first rendered it necessary to undertake the study of Anatomy, 2d This leads us to the knowledge of Physiology 3rd It leads us to the study of nature & the animal Vegetable & Fossils kingdoms, without which the works of nature would remain unexplored & unadmired, 4th it leads us to the study of the human mind affords and furnishes us exercise for our moral faculties, for without diseases there would be no benevolence or Charity, also there would be no hospitals to relieve the indigent, 5th as darkness gives charms to light, in like manner is disease necessary to inspire a relish for health 6th it serves to increase our moral virtue, for many owe their virtue to a spell of sickness 7th it reconciles us to death & induces us to console ourselves for the loss of our friends Pain itself unconnected with disease has several important uses Pain is the harbinger of disease and often points out its seat. Those diseases or disorders which creep or steal slowly on the system without pain are most to be dreaded, such as Cancers Pulmonary Consumption Chronic inflammation and Chronic obstructions of all kinds, on entering on pathology, I am without a guide, & Boerhaves notions and observations are short & not suited to the present improved state of medecine

Gaubers attempts to bring it into a system, but it is so full of the humoral doctrine, that is of little service to Students of the present day

Pathology treats of the causes signs & seats of diseases The different causes of diseases may be divided into four, 1st Remote 2nd Predisposing 3 Occasional or exciting, 4th Proximate (or morbus insus) They are all links of one chain; For instance in an Inflammatory fever 1st Cold is the remote cause, 2nd The debility produced by the cold is the predisposing cause, 3d Heat the occasional or exciting cause & 4th Convulsions or morbid action of the arterial system, the proximate cause, By the proximate cause I mean the morbus ipsus of Gabius, or the disease itself, 1st General predisposition & debility is the predisposing cause & debility is the predisposing cause of all diseases, wether it be natural or acquired, by natural debility I mean a predisposition to disease brought into the world with us, this debility is always attended with more or less irritability, Predisposition or debility is acquired in Infancy Youth in adult life and in old age, in a great variety of Instances ways all of which shall be taken notice of hereafter It is acquired in in infancy and Children by injuries at the time of birth, by the custom of washing the tender skin of Infants with Ard. Spirits

by aliments of an unwholesome quality, or the excessive quantity
by the passions of Nurses & Mothers, by improper methods of dress-
ing, by Opium Ardent Spirits &c. being given to Children
than which nothing is more injurious, by premature applications
of the mind to study, particularly such studies as are propor-
-tioned to the faculties of a child, as Grammar, dead languages
&c. by confinement to close school rooms, without exercise, envel-
-oped by Azotic Air for 6 or 7 hours, to which may be added
the despotism of Schoolmasters; by falls and other accidents
by Children being taken up by the heels or hair of the head &c
by being shaken violently by Angry Nurses or Mothers &c
debility wether natural or acquired when it occupies any
particular part of the body has been called a Temperament
The temperaments as divided by the ancients are Four viz
Sanguineus, Bilious, Flegmatic and Melancholic, but I ob-
-ject to the term temperament as conveying no definite mean-
-ing, and I adopt in its stead Predisposition, by which I mean
a preternatural aptness to disease in any particular part
of the body founded on debility either natural or acquired
and attended with a preternatural excitability, By excitabil
-ity I mean a capacity of being acted on by Stimuli ——

There are 9 predispositions

Debility is seldom general but occuring for the most part but one system of the body predisposing to disease.

Predispositions are divided into 1st Arterial 2d Hepatic 3th Nervous 4th Muscular 5 Cephalic 6th Phrenetic 7 Alimentary 8th Lymphatic & 9th Cutaneous. Arterial Predisposition is subdivided into Aortic, Pulmonary & Uterine and predisposes to acute diseases, specially in warm Climates, There is an excess of blood &c.

Hepatic, Persons of hepatic predispositions, are said to have Livers preternaturally large that secrete a preternatural quantity of bile exists most frequently in warm climates & in autumn discovers itself by aptitude to Diarrhea Colic &c —

Nervous discovers itself by a susceptibility of being acted violently upon by the slightest corporal or Mental impressions persons of this predisposition are subject to Hypochondriasis & Hysteria happy and myserable half a dozen times a day

Cephalic, is attended with aptitude to head ache Vertigo Appoplexy and Palsy, differs from Phrenetic in occupying the Inferior part of the brain. —

Phrenetic differs from the Cephalic in occupying the superior part of the brain & discovers itself in early life by an uncommon aptitude to acquire knowledge quick Perception is

is attended with great aptitude to becomes deleterious from the slightest causes fever persons of this predisposition may be said to be all mind -

Muscular is known by little sensibility & great irritability in the fibres, Persons of this predisposition are disposed to active employments and dislike confinement If necessity compels them to set in one place their hand feet & head are continually in motion they walk fast ride swiftly and may be said to rest in activity, They may be said to be all muscles

Alimentary is divided into Gastrites & intestinal because the stomach is often very excitable with healthy bowels and vice versa Lymphatic The lymphatic perform their office which induce celerity & force

Cutaneous discovers itself in the facility with itching redness eruptions &c are excited upon the skin from the slightest causes, also in great difficulty of healing external wounds sores &c - Some one of these predispositions, is present in every person. There is scarcely any person but what has some weak part about him, Perfect health is as rare as perfect virtue or perfect reason Predisposition is not always separated or confined one system, the are combined in various ways

The hepatic & Alimentary are often united, Nervous Muscular & Cephalic in Persons subject to Epilepsy, the nervous & Cephalic are often blended together, Nervous & Arterial sometimes combined in Hysteric persons Predispositions vary in different periods of Life & in different seasons of the year Thus the alimentary prevails in Early life, Arterial in middle and Nervous and Cephalic in old age, Arterial predominates in spring Hepatic in Spring Summer, Nervous in autumn Predisposition often descend from Father to son, but are mixed changed or lost by intermarriage with strangers, Some nations loose their predispositions by the intermission of Strangers Weakness in one part commonly altered with preternatural strength in others, The same remote causes act very differently in Persons of different predispositions, Persons with the same exercise and age & on the same day may be taken with different diseases according as the different predispositions predispose to different affections, the same medicines also produce different effects The same Epidemic also appears with different symtoms This difference of predisposition explains the reason why the gout attacks such opposite parts of the body The weakest parts certainly attracts disease Lord Cornwallas used to say he could always tell the weakest part of his camp by Gen: Lee always being sure to attack the weakest part, a man may tell which is the weakest part about him

by the same means for diseases will attack that part, Relief has been giv-
-en to many disorders by the cessation of predisposition from want of exci-
-tability thro' the influence of time or when the disorder excitement is below what is
natural, Healthy excitm may be placed at 50, This is kept up by the stimu-
-li which support life already enumerated, If part of these stimuli are
suddenly abstracted the excitement will come down to 40, there being
at the same time an accumulation of excitability, that is the debility
of abstraction, If the number or force of stimuli be suddenly increased
the excitement first rises to 60 and then descends to 40 carrying along
with it suffocating excitem.t This is the debility from action, Debility
from both its causes occurs most frequently in Children & in Old people
& in the middle of the night, in the morning & evenning, Debility ad-
mits of considerable range and does not always end in disease
Elevated excitement ~~does not always~~ is the usual premonitory sign
of disease, if the causes of debility continue to act long or their force or
their number is increased, depression will take place, The Signs of
depression are coldness, heaviness weariness and depression of
Spirits contraction or paleness of the skin, debility ranges from 40
to 60, but there is only a cobweb partition between depression and dis-
-ease, depression forbids action & calls for repose abstinence &c
The electric rod does not more certainly attract Lightning from the
clouds

unbaie fenit, ka Lunsh
[illegible] to [illegible] at [illegible]
They are often combined
[illegible] firm, 1st [illegible]
[illegible] & [illegible] Stream
but they [illegible] return because
[illegible] has time to [illegible]
accumulation of [illegible]
they suffer [illegible], what [illegible]
[illegible] stream

"and inertia - ... [illegible] the [illegible]"

[illegible] water [illegible] disease

than debility invites to depression & depression to disease, debility and depression do not always exist in a seperate state they are often combined, both existing at the same time in different parts of the body, A succession of stimulus acting upon the accumulated excitability seems necessary to the production of disease, A Loss of Equilibrium as when first falling a sleep &c are sometimes sufficient to produce it, Soldiers & Sailors &c escape disease while they Labour constantly, Physicians seldom get sick till Patients begin to get well, a sudden accumulation of excitability is prevented after violent exercise by abstracting it gradually When stimuli are continued so long as to excite debility, obstructions &c may be produced without disease and this may be termed disorder Disorders are morbid affections in different parts of the body, in which there is a want or expenditure of excitability with a waste of sensibility and vitability; a want of sensibility and motion it occurs in the forms of stupor Torpor &c and it is commonly occasioned by the force and number of stimuli being so great as suddenly as to destroy excitability thus preventing the destruction of disease Disorders are most common in Southern climates, Chronic obstructions of all kinds are disorders, disorders are many diseases in a unit

General Proposition — all the remote and exciting causes of disease however diversified are an unit, all included under the name of Stimulus

Ans: Above with the exception of debility

do. ~~contracted and paler~~

+ in any of the deep —

u

Suffocation ensues.

/ Often

L. pres —

the diseases produced by them are the same, as fire is the same wether generated by friction, precussion detonation Electricity &c.

General Proposition, diseases when excited consist in morbid excitem.t or irregular action in which nature is driven from the helm, & the functions of the body are performed with difficulty Excitement may be excessive and not morbid, as in excessive or elevated excitement produced by running dancing or any violent exercise disease is often combined with the remains of depression & sometimes of predisposing debility, The remote and exciting causes of disease are often blended together and act at the same time, also the exciting and predisposing. Disease is either obvious, sensible or suffocated, reaction is the effect partly of the elasticity of the muscular fibres, morbid excitement is often greatly disproportioned to cause suffocated excitem.t - discovers itself by wakefullness flushed countenance, yellowish or redness of the Eyes, pulse natural it may be converted into obvious disease by &c ——

General Proposition, Morbid excitement or disease is always partial, Thus in fevers it is chiefly confined to the blood vessels in Manica to the brain, In tetanus to the muscles in dysentery to the intestines, absence of excitement in some one part seems necessary to favor its accumulation in others parts, Absence of healthy excitement in one part seems necessary ——

by heavy

there is no universal paradox

to favor its accumulation in other parts parts, Absence of healthy excitement in one part seems necessary to a morbid accumulation of it another There are frequently days weeks and even years between debility and the morbid excitement produced by it

General Proposition There is but one fever one disease throughout the world & all its forms are produced by morbid excitement or irregular action There is but one sin and that is self Love, Adam was affected by debility in his will when he ate of the forbidden fruit, It is immeterial where situated or however varied by texture, while I contend for the unity of disease, Obstructions and Shirrus of the Liver are the effects of disease & not disease, All disorders are confined to cases where morb. excitm. has ceased or were never excited Disorders are many disease but one Many people die of debility or disorder without disease, Where disease is present the whole system is more or less deranged by it, There is preternatural excitement without excitability & excitability without excitement Old afsocians are destroyed, The system affected with disease may be compared to a Ship in a Storm at sea, Nature is driven from the helm and every thing is thrown out of its natural situation

Disease may be compared to a Ladder ascending & descending by the following Steps, 1st. Elevated natural excitement, 2d.

Debility (or predisposition) whether from action or abstraction 3.d Preternatural accumulation of excitability, 4th depression 5 Action of an exciting cause or an irritant 6th Prostration of excitement below the point of reaction to such a degree as to be relieved by stimulants & not evacuants 9th Disorders or effects of disease, 10th & Lastly debility left by the cure or removal of disease, This is the usual order but there are many exceptions sometimes remote causes leap over debility & depression and directly induces disease, sometimes overleaps disease and produces disorders, remote causes are sometimes so violent as to leap over all the intermediate steps inducing sudden death, We sometimes see debility Oppression Depression Disease Disorders & death, all at the same time occupying different parts of the system, Inflammation (not as Winters supposes the highest grade of disease, is the effect of disease & only takes place when morbid excitement is moderate, Death often occurs without Inflammation as in violent Fevers that kill suddenly, they kill by the immense force of the remote cause extinguishing Life without giving it time for the production of Inflammation or even disease, Death often occurs from Hydrocephalus Internus Apoplexy &c without any Inflammation discoverable on dissection, Morbid excit.n is sometimes so violent as not to admit of effusion of any kind

Question. How many forms of disease are there

Answer - Six. 1st convulsions

2 Spasm

3 Preternatural heat

4th " Itching

5 " Ataxia or Stasis

6, suffocation excitement

Question do you confine the forms of disease to Six

Answer. No. there may be many grades of them

The worst optalmia are those were Inflammation is not evident of the Eyes they may be made so by the plentifull bloodletting we are born with an inate predisposition to disease or morbid excitement

The Different Forms of Disease are Six viz

1st Convulsion the proximate cause of fever, This is chiefly confined to the blood vessels & Muscles occurs in Fevers Parturition &c

2d Spasm This affects the muscles as in Cramp, the bowels as in Colic, the stomach as in Gastrodynea, the Trachea as in Cynanche Tranchealis the Uterus as in Parturition &c &c It is divided into Chronic & Chronic the former is constant, the latter alternative

3a Preternatural heat either internal or external, the former as in the Skin & Stomach &c. the latter

4th Itching, This occurs on different parts of the Skin Anus, Pudenda

5th Aura or Flocks; as Aura Arthritica in Gout & an aura called by the French Tic Doloreaux, 6th Suffocated excitement This occurs cheifly in the lungs & brain Blood vessels, I have known it in the head it consist of sudden darting pains, as a shock of Electricity it goes and comes on

Thy no means limit the forms of disease to 6 there are probably many shades and grades of the six primary forms, all issue from one cause morbid excitement, There is hardly any disease confined exclusively to one form of morb excitement, often 2 or more exist at once in the same part, sometimes they are all present at the same time, but in different parts

[illegible]

[illegible]

[illegible]

Sometimes they succeed each other in the same part and even on the same day, As we see storms sometimes with wind, then rain hail Snow &c, Now storms are a unit and arise only for one cause morbid excitement in the atmosphere, Thus Gent I have given you the history of the Phenomena of disease, it may in every disease in a greater or less degree, my labour of 50 years and the works of Dr Sydenham

Application of the above Principals, When excite is elevated, regard the system in a unsafe state, remove stimuli of of all kinds I advise rest, remove the predisposing cause debility by gentle stimuli gradually applied, defend the system with double the care, when debility is the greatest, at midnight in the morning and Evening gradually expend excitm to prevent accumulation of excitability, If disease consist of irregular action let your remedies be calculated to make it regular, Is disease an unit then why not remove the same grade of it wherever seated by the same remedies, Typhus pulse, whether it occurs in Fever, in Pulmonary Consumption or in madness, Calls for simular remedies The same grade of morbid excitement in the Lungs, Brain Liver Bowels &c call for simular remedies, I do not however mean to say that disease is always to be cured by the same remedies they require to be varied according to the part affected and the violence of the disease &c

We next inquire into the effects of disease —

2 Lesion of organic, epithelial or functional

3 Changes certain fluids into Pus

4 Cancer

5 Changes in the Blood

6 Gangrene

Seats of disease

1 It many diseases are double —

2 Many changes in the Menstrual are certain medicines

The Signs of Disease. A few observations are necessary

They have been divided into common and proper, also into Primary & Secondary, Symtoms of disease have been divided into Diagnostic & Pathognomic, They are however uncertain and unnecessary —

1st Relation, Sympathy & association different in the diseased & healthy state —

2d Signs of the same diseases are different in different people

3d They differ in force of the same disease in the same Persons

4th They differ in Climate in the same Persons —

5th They are in many instances a part of the same disease —

6th They differ in same diseases, They are the same disease

7th They differ as relate to its forming state —

8th They differ as relate to its height, crisis and tendency to health

9th They in different days differ —

The Signs of the different diseases are, to be taken

1st from Perspiration urine and fæces including the quantity quality and times of discharge Costiveness is the sign of Predisposition to Dysentery; Vertigo and Apoplexy —

2d The Tounge, 3d Respiration, 4th Conversation, & Countenance

5th The position of the body in bed, 6th State of the Muscles —

7th Appetite 8th Mental Faculties, 9th State of the body as to heat or Cold, 10th Existence or non existence of Pain, also the nature of it —

Have we not digressed
so long sometimes down in
northern,

11, rest and return

Ascent in nerve —
Lassen —
Passing in the horses
Binding in the brain
Ache in the head

Remarks on Pain There are three causes of pain, 1st Stimulus over distending & producing a tendency to Mechanical solution as in fevers luxations of bones &c, 2d By such a relaxation of fibres as disposes them mechanically to contract, 3d certain chemical Stimuli, The signs of pain appear in every part of the body, all in a convulsed or contracted state, hence the Phrase of biting the dust, It produces the loss of domestic affections, the head pays dearly for its pre-eminence as the seat of the mind, as it suffers by sympathy with every important viscus ——
Stomach Uterus Liver Spleen &c, That pain may be felt it is necessary that the extremeties of the Nerves & the mind be not preoccupied so as not to be elevated above the grade of pain, sometimes in highly elevated states blisters cannot be felt, also when the system is below the grade of pain, as in low states of Typus Epilepsy & Drunkenness have suspended the pains of Parturition An insensibility to the pains of wounds in battles is owing to the excitement of the system being above the grade of pain some submit to the pains of severe operations with readiness, Insensibility of the primative martyrs to pain amidst all their sufferings owing to the same cause, and, when Indians are suffering they will cry out I made your Brother or Father suffer before, Pain varies with the cause producing it, Thus Pain from a blunt ——

Paris is divided into Mechanics
and Chemistry —
Animal. called heat
Mes — blood —

injury from a blunt instrument is different from pain when the injury is done by a sharp instrument, Pain at first excites the mind, afterward agitates it with the fear of death, in a very high grade it occasions the Sufferer to call upon his maker, or dear or departed friends, sometimes it occasions sudden Silence, singing laughing, occasioning transport of Glory, Pain is most sensibly felt in the extremities of Nerves, Pain does not always accompy disease, nor always proportionate to disease, Pain is often induced in a part remote from the impression producing it, Pain is of an attractive nature, This explains the reasons why fevers attended with much pain in the back & bones are rarely fatal, Pain is most felt, sensible, in persons of a Muscular Predisposition, Women most susceptible of during the periods of Manthruation and Pregnancy, Circumstances of a Consolitary nature with respect to pain, 1st It is seldom constant but has intervals of ease & is then best borne as we see in Colic Stone &c, 2d Incurable pain is seldom accute but dull as in cancer &c, 3d Constant pain is contrary to nature as it destroys itself by wearing away the excitability ——— ———

1st There are diseases without pain - 2d The pain is not always proportionate, 3d often felt in parts remote from the disease as head ache from Bile in the Stomach 4th Altho an unit it imparts different sensations according to its grade, being accute in membranes

1st they give no [illegible] by pain

3 by change in the weather and dif-

4th the difference does not [illegible]

[illegible] in the seat —

Galen, was the first who said any thing about the Pulse —

The natural and healthy Pulse is known by its being, open, vigorous soft free from all kind of resistance — — — — — — — — — — — —

twisting in the bowels, jumping in the tooth ache &c &c.

Related to Pain is Anxiety. Nausea is another sign of disease different from pain & anxiety, Pain is sometimes so acute as to destroy life, I must here again repeat, all the Signs that of the Pulse is the most valuable, Diseases of the head yeild most readily to purging, those of the bowels to purging, those of the Lungs to V. S. & those of the Limbs to blisters, Is there no sign of disease in the viscera but pain? Yes the tounge Pulse Countenance perspiration respiration urine faeces &c. Of these I regard the pulse as the most valuable, but let not any of these direct you as to the causes of disease or in your prescription for them, My doctrine rejects none of these but in it the greatest homage is paid to the

Pulse.

This Pulse may be called a Nosometer or compared to the dial plate of a Clock or watch it informs you of all that is going on within, In order to acquire an accurate knowledge of the Pulse in its diseased state, it is necessary in its healthy state, and also in the different Stages of Life, a healty Pulse beats 66 strokes in a minute from 66 to 80 soft bigorous free from all sense of resistance and equal intervals between each pulsation

This state differs under different circumstances, 1st it varies according to the age of the Person, At the commencement of Life or a few days or

The Pulse in old people undergoes three changes

1st Frequency

2 It becomes more full —

3 It intermits. — — —

It is a good sign in sickness when an old man pulse begins to intermit —

few weeks after birth, the Pulse ranges between 130 and 140 strokes in a minute, towards the end of the first year 124 at two years of age from 110 to 116 at 3 from 90 to 100 at 4, 5, or 6 years of age from 80 to 100 & at seven it falls from 90 to 72, In adults it is from 60 to 80 generally 66 in the minute — In old age it is slow and intermitting, This is so much the case that when its otherwise it shows signs of disease, at the age of 60 the Pulse beats 60 In old persons of this City its beats only 36, In some according to Dr Weberdon it descends as low as 26 ——

In Males, 2d Sex influences the Pulse in it quickness, that of Females being much more frequent than that of Males ——

3d different States of Society or Civilization influences the pulse, It is slower in Savages than in Persons brought up in a Civilized State, Savages want the numerous stimuli of thought conversation &c which civilized people enjoy, hence the Pulse is less frequent in Countrymen than in Citizens I have felt the pulse of 10 Indians and found it below 60 in 8 of them the other two reached that number but one of them had been previously sitting by a fire & the other was the offspring of a French man, — All those who spend their lives in Idleness have slower pulses than those who are busily employed ——

4th the Sizes of people affect the Arterial system, its pulsatory motion being quicker in the Short or low, Cæteris paribus than in the tall ——

+ by light and darkness –

5th Climate & the different seasons of the year affect the pulse, being quicker in warm than in cold climates, In Greenland it scarcely exceeds 40, In the West Indies quick in new comers than in the Inhabitants, In new imported flavers it is quicker than in those we have had some time among us

6th Different times of the day influence the Pulse, It is slower in the morning, at noon it is at its highest & then gradually descends till evening, at bed time it is generaly slowest on account of the excitability being worn down

7th Different in the sleeping & waking State slower in the former by 10 strokes

8th Different positions of the body Influence the frequency of Pulse; thus it is slowest when on the back quicker when on the sides quicker still when sitting up, & quickest while in an erect posture

9th Fasting food and drink especially such as are stimulating influence the Pulse by quicken it, accelerated by a full meal & diminished by fasting for some time, but afterwards it rises, so persons who die of famine die of a fever

10th Different positions of the arm influence the Pulse, when the arm has been exposed to the Cold some time, the pulse becomes much slower & also when the arm is pressed under the body, and when its Muscles are in action, hence the Propriety of warming and

+ it is quickness has also been

grains to 60 –

grains to 60 – – – – – – – – –

Mercury when it begins to touch the mouth –

" Mercury quickens it. When it begins to touch the mouth. – – – – – – – – – – – – – – –

+ and suspending respiration

relaxing the muscles of the arm before we feel the Pulse ——

11th Exercise of the understanding & the Passions of the mind, those of the Sedative lowering and vice versa ——

12th Anger quickens it to 104 conversation quickens it, hence the propriety of feeling the Pulse before the Patient begins to describe his disease ——

13th Bodily exercise, If the natural state of the Pulse be 64 when sitting, standing will increase it to 68 walking at the rate of two miles an hour to 78, four miles to 88 & running from 140 to 160 in a minuet, ——

14th Pregnancy quickens it Quicker also when the menses flow and during menstruation, It is of consequence to know this in Chronic Cases of disease, All Pregnant women have their Pulse preternaturally quick or slow ——

15th Certain Medicines quicken the Pulse, such as opium, bon-ets, Purges, Bark, Blisters Steel hot and cold baths &c. Blisters affect the pulse more or less according to the parts applied, the ~~must~~ must know the blister pulse, Opium Pulse & Mercurial Pulse &c to distinguish them from the morbid pulses ||

16th Coughing quickens it, * [illegible]

17th Fear influences it, hence in visiting a Patient we should wait a few moments, in order to let him get over the agitation

+ Judge Peters

Judge Peters. —

19th Light and darkness. —

produced by our presence, I have seen the pulse fall after prescribing
Vf. 18th Intensity of thought influences respiration quickens the
Pulse, There are some diviations from the general rules of the Pulse
for example, there is a Gent in this City whose Pulse is 100 in a min-
-ute when in good health, & a Lady whose pulse does not exceed
40 in a minute in health & 60 in a high fever, In other it is pre-
ternaturally quick, I heard of a Clergyman whose pulse in a
healthy state beat 100 in a minute, a fever afterwards restored it
to the common standard there must have been to much excita
bility in the system, this diseased or morbid state was remov-
ed by the action of a fever, Before I enter upon the morbid
states of the pulse, I deem it necessary to deliver a few Physilo
-gical propositions

1st The Heart & arteries are connected & invested with muscu-
-lar fibres possessing great irritability or a susceptibility of being
acted upon by the different stimuli, hence if one part be affected
the whole will sympathize, They may be compared to the sensitive
plants or to the Bells of the Jewish high priest touch one and all
will ring, 2d The heart & and arteries muscular fibres possess irritability
3d The same motions excited in one part of the Arterial system
are communicated to others, by means of their contiguous sym-
-pathy

"his Pulse was small thread like and jarring

her Looking

This is illustrated by the case of Hicks who died in this City with an enlarged omentum, which prefsed upon the Aorta, & affected the whole Arterial Syntem, and contracted its diameter, (was very small the pulse,) This will lead to the explination of many other circumstances, for in most diseases we may expect to find the same kind of action in the Artery as in the diseased part, Is the Pulse tense in acute Pneumony? The same occurs in the Pleura or membrane of the lungs in the whole arterial Syntem, Are the befsels of the lungs engorged in a Pneumonia Notha, The same occurs in the whole, are there intermifsions in the Pusations of the heart? The same takes place in the whole arterial system, Is the Stomach or upper bowels inflamed? The pulse is small because the befsels of these parts are small The Pulse is more tense in Inflamomation of the Colon only because the arteries of the Colon are larger, If the pulse is not small in Optalmia & Inflammations of the joints, it is only because larger befsels are brought into Contiguity.

There are diseases in which the pulse does not sympathize, but these are few & may arise from the following causes, 1st from a weakness of the heart itself, 2d From a want of irratibility 3d from suffocated excitement, 4th from the disordered state of the artery at the Wrist 5th From large portions of fat prefsing upon the Pulse 6th from accidental prefsure of the muscles of the arm, by the posture of the body

1st by weakness
2 from weakness of the artery at the
3 by fear
4 by compressing the aorta
5 from the intestines —
6 from the mentioned
suffocation, in current
7 from cold
8 by a blow which offer
only one near of the Box
9 - from strong sing [illegible]
a in the Lungs —
10 Blood, when the pulse
is weak, from in particular Ex-
in inflamed the Rheumatism is
slower —

6 from Cold, 7th from want of irritability in the Contiguous, 8th from want of sympathy in the heart preventing it from sympathizing equalizing the action of different parts, or the disease being insolated in the lungs as in Catarrh, the artery does not sympathize, so we are to bleed in Catarrh without regard to the Pulse, 9th from unequal excitement in the blood be feels as in ataxic fevers of Albert in Palsy & Cough, this want of harmony accounts for the fact mentioned by J Hunter, viz sizy blood with a natural pulse, there may be great disease in one part with little action in another, Let not the number of these exceptions preclude the feeling of the Pulse for they do not occur in more than one case in 20 & we sometimes see the absence of pain in malignant fevers when the tounge is foul &c and vice versa in diseases of less consequence ——

Thus have I mentioned the different states of the pulse as they occur naturally in different stages of perfect life, But as Physicians it becomes us to go farther & acquire a knowledge of this important part of the human frame as it varies in consequence of the numerous incidents & diseases to which it is subjected to viz ——

The Morbid states of the Pulse

These are known 1st First by their frequency & quickness, these are not necessarily connected for the pulse may be very quick and yet not frequent as in the yellow fever, By frequency is meant the number of

[illegible]
[illegible]

of strokes in a given time examinued, By quickness the time in which each stroke is performed, The Pulse varies from health in quickness & fullness as in Yellow fever & other acute diseases to 40, 30 20 & in two or more cases, to 9. In Apoplexy it sometimes falls as low as 7 ——

The Quickness is probably caused by an irritable state of the blood vessels, they contract more quickly by the stimulus of the blood (the arteries especially) this irritability I conceive to be induced by the stimulus Miasmata - hence it occurs in Intermittents yellow fever &c This circumstance gives rise to the intermitting pulse, this is when there is a cessation of pulsation for a certain time after every 1st 2d or 3d stroke & frequently occurs in malignant fevers ——

The slowness may depend upon 3 causes 1st pressure as in Apoplexy & Palsy the pulsation being equal to each other but intermissions occurs 2d Spasm of the heart & 3d defect of irritability in the Arteries

2d By this force & irregularity, this is of more consequence than variation in frequency quickness and fullness, also by imparting a jerk sensation to the fingers resembling a shattered quill —— We now proceed to consider the different states of the pulse as they occur in Fever 1st The depressed Pulse, This state of the pulse is occasioned by stimuli acting so violently as to depress the system below the point of reaction, or by pressure on some great vessel, It often descends so low as 40 30 20 & sometime

1 [illegible]

2 [illegible]

3 [illegible]

4 [illegible]

5 [illegible]

[illegible]

so depressed that it is imperceptible, In the depressed pulse the heart and Arteries ~~press~~ fill & contract their thinness & elasticity, It is raised by bf, It is sometimes preternaturally frequent or slow, attended with intermissions, & sometimes natural, It occurs in Plague Yellow Fever &c. Malignant Small pox & Pleurisy, It is either partial or general, occurring in the extremities in the former, & in the latter occasioned by stimuli depressing the strength below the healthy state. It resembles the weak or Typhus pulse; the following directions will serve to distinguish them.

1st The depressed pulse is known by its occurring in the beginning or forming states of fevers, or in the paroxisms of such fevers & other diseases as are periodical.

2d By imparting a sense of tension to the fingers when long and attentively felt

3d By occurring in morbid affections of the brain heart, Stomach & bowels more frequently than in diseases of other parts of the body.

4th By its being raised by bleeding, Purges &c taking off the morbid excitement;

5th By its being frequently attended with slowness or intermissions, this pulse may be compared to a tree bent, by the winds &c rising to its pristine state when the storm blown over, While the typhus resembles a tree shattered by lightning & which cannot be raised but by the hand of Art

2d The Catgut, Tulkey or Locked Pulse

Generally quick, but not always frequent is small quick tense & distinct, imparts a sensation to the fingers similar to that produced by feeling a peice of tense Cat Gut, whence I have named it, It occurs in malignant fevers

3d The Synochus Fortis, this is the reverse of the two forming a full round vigorous frequent & quick pulse without hardness which occurs in the highest grade of bilious fevers, Exercise produces a pulse somewhat similar to this

4th Synochus Mitis, This is a full, round soft and frequent occurring in mild bilious fevers

5th Synocha, or common inflammatory pulse, being full quick frequent & tense, but not round and is known by heat thirst &c, occurs in common inflammatory fevers, this pulse exists sometimes in the Plague, Y. Fever, Jail fever & small pox, but more frequently in Pneumonic affections, Rheumatism & hydrophobia

6 Synocula, A quick frequent moderately tense, but small pulse, A diminutive of Synocha, imparting a sensation to the fingers similar to a small quill, & occurs in Chronic, Rheumatism, Gout, Phthisis Pulmonalis &c & in the 2d stages of other fevers

7th Synochoid, This is alternately a hard and soft

with the Surgeons [illegible] [illegible]
Convention

Pulse, feels like a shattered quill & is a compound of Synochus & Synocha

It occurs in the passage of fevers from the inflammatory to the low state of bulk, or from an acute to a chronic disease, feels like a quill that has been trodden on.

8th The Typhoid, a frequent & less tense than full pulse this is composed of Synocha & the slow chronic state of fevers & occurs in the Hectic & Puerperile Fevers & in Scarlatina &c. The pulses preceding Typhus are above par those succeeding Typhoid are below par

9th The Typhus, a weak small frequent but not full or tense pulse, this occurs in the low state of Chronic fevers, also in the close of inflammatory diseases, when depleating remedies have not been used in the first stage, the blood vessels in this appears to be deprived of a part of their irritability, it is here that V.S is forbidden and stimulants are to be given

10th The Hectic Pulse, the forms of this pulse are various being occasionally Synochoid Typhoid & Typhus, It occurs in Phthisis Pulmonalis, Podagra of Tabes, from the Lues venera and Scrofula

11th The Wobling Pulse is unequal or fluctuating, tense quick & very frequent & may be divided into two, 1st one two or three quick strokes succeeding a slow one & 2d one two or three slow strokes succeeding a quick one

Cut it has no lettering

12th The Dicrotus & Capricans Pulses the former the strongest

13th The serrated Pulse, strikes the finger like a saw

14th The vermicular Pulse, small frequent and resembling the motions of a worm

15th The Creeping Pulse, weak small occurs at the close of life

16th The apparently natural Pulse, occurs in the worst malignant fevers, great danger is to be apprehended from this, difficult to be distinguished from a healthy one

Scarcely ever any one of these present alone, they are therefore combined 1st in double proportion, as full & weak, full & frequent, full & quick, quick & frequent, depressed & weak slow and intermitting &c. the stroke which succeeds an intermission is twice as strong as the 2 or 3 preceeding

2d They are combined pounded in a three fold ratio, as full strong & frequent, small weak & slow, at the same time, 3d In a four fold ratio as full strong quick & frequent at the same time

17th A full bounding slow & moderately tense Pulse, This occurs in Palsy, Dropsey &c. It is especially slow in the affected side as in Hemiplegia, I examined the Pulse of a Paralytic patient whose Artery beat on

the affected side only 50 in a minuet while on the other side it beat from 80 to 90

19th. The Aneurismatic Pulse, full tense and jarring, there is sometimes an absence of Pulse for 2 or 3 days I have heard of an instance of it for 7 days, this pulse occurs in aneurism, whence, its name, a total absence of the Pulse occurs often in violent affections of the Stomach & bowels, it lasts for hours One Lady I have known to continue without a pulse for 36 hours in consequence of eating some oyster, this Lady has since recovered & been quite well for many years

In order to inform your patients of the state of the pulse, which sometimes extreemly anxious to know, you should compare it to a scale of 10 degrees with 5 above and 5 below the healthy point, the pulse is very much influenced by the state and strength of the body In a Pidgeon it is 100 in a dog 80, In a ram the Pulse has been found to beat 65 in an Ox from 36, to 38 in a horse from 34 to 36 Strokes in a minuet

I have now delivered all the pulses which have occured in my Practice, Dr. Galmar, a French Physician which he calles the, Gaseous Pulse, 10 Soft full & round, but sinking under the fingers, even the pressure of the little finger produces this

I shall next give you some directions for acquiring a knowledge of the State of the Pulse —

1st. Never feel the patient pulse the moment you enter the room your presence excites hope, fear or some emotion in the mind which has an influence on the pulse. If the weather be cold warm your hands & feet first, but beware of entering into any conversation before you feel his pulse, as the influence of conversation upon the Pulse is very great —

2d. Place your whole four fingers on the artery, this gives you a much better opportunity of judging than one finger could do.

3d If you feel the patients left arm use your right hand & vice versa

4th Feel the wrist of both arms, as there is in many cases a difference in the two from several circumstances, as an exposure of one arm to cold air, pressure on the Artery &c &c —

I have corrected my judgment frequently in this manner from one arm I prescribed Bleeding, from the other I retracted my opinion, Never remove your hand till you have felt 20 strokes, I have observed an intermission in the Pulse at the 16th stroke, The Chinese Physicians feel 40 and hence perhaps their accuracy in the Pulse. — If the case be critical Shut your eyes and order silence in the room —

[illegible]

[illegible]

& to use an expression of Dr Darwins "Concentrate all sensorial power in your fingers ends" the influence of sound &c detract from the accuracy of feeling — If the radial be from any cause not easily felt, feel the temporal artery which is next best — & here Gentlemen excuse my making mention of Blisters the caution in applying them, Never apply them so as to prevent your feeling the pulse, if you do feel it afterwards you give so much pain as to make an alteration in the pulse, the temporal artery must be felt, this artery you must feel in diseases of the brain ———

Thus Gentlemen have I related the knowledge I have acquired of the Pulse during my Reading and Practice, they are the experience of my life, they dictate when bleeding is necessary & in what quantity Always feel the pulse before you prescribe any of the following remedies Vomits, Purges, Bloodletting, the Hot & Cold baths, Pediluvium also before the use of stimulating Medicines, as bark & wine, stimulating and nourishing diet & drinks, as they all change the Pulse very much — The frequency of the Pulse tho' of little consequence comparatively with the force & other characters of it, has been much relied on by the Physicians of Europe especially of G. Brittain, They use for the purpose of acquiring a knowledge of its frequency, moment & minute watches. But this is ridiculous and I hope will never be brought into American Practise, A Spanish physician by the name of Solano has made many many observations on the Pulse, from some —

[illegible] by [illegible] to be the only
[illegible]

of which he asserts that 180 is the greatest number of strokes the artery can beat consistently with the recovery of the Patient, 200 in Hydrocephalus is quite common but whether there ever occurred I know not The observations of Cullen are opposed to those of Dr. Solano, he says Dr. S. observations are useless

Plato we are told has inscribed over the door of the school where he taught his Pupils, "Let no one enter who does not understand Geometry" In like manner ~~where~~ were I to dedicate a temple to medicine, I would inscribe over the doors of every apartment Let no one enter who does not understand the Pulse

Of the remote Causes of Disease

Diseases have been divided into Idiopathic & Sympathetic, this is not however a good division for disease is to be cured in the same manner whether Sympathetic or Idiothetic, Hydrocephalus Internus is thought to be produced by worms in some instances, here the worms in the intestines constitute the original disease, the Hydrocephalus is the Sympathetic, this Sympathetic Hydrocephalus is to be cured however in the same way as Hydrocephalus from a blow on the head, Diseases have also been divided into Contiguous and non contiguous, into Endemic & Epidemic Sporadic, vernal Autumnal &c. The remote predisposing & exciting causes of disease act in producing it

Assists of Chemistry

Chemistry of Medicine

drugs are divided as they affect the diffrent parts —

depressants

[illegible]

narcotics

[illegible]

[illegible]

[illegible]

Act

hot [illegible] temp

of blood

sometimes seperately at other times two or all are combined, we come now to enquire into the numerous causes which lay the foundation of disease, It has been aptly said as soon as a Child comes into the world "it inhales the lurking principles of death," The remote causes predisposing children to disease are the following, 1st The ignorance of the midwife with respect to delivery. 2d Washing the Child in Spirits wine harsh soap &c, 3d the use of Spirits internally & spiced diet &c. 4th Sucking bad milk &c 5th Caps swaddling cloths &c 6th The manner of Education, confinement in Close schools &c. 7th the amusements of Children subjecting them to falls burns bruises &c

The Atmosphere produces diseases by its sensible and insensible qualities, The former are heat cold moisture dryness density & variety. Those of the latter are marsh & human effluvia, and from these originate all febrile diseases

Of Heat, This is an universal stimulant, when moderate as when at 75 it is friendly to health, but when above this produces debility from action, When in excess its effects are shewn 1st in the arterial system, by producing fever &c 2d when combined with the rays of the sun it affects the brain producing what has been called insolation, also sleep stupidity and death, 3d on the nervous system disposing it in a peculiar manner to be affected by stimuli of every kind, ~~producing syncope~~ convulsions & death

Hot exceeds — 96

Warm — from 96 to 75 — 75

temp — from 75 to 32 — 75 - 32

Cold below 32 —

"Sir Robt. Wilson says that it produced false vision

4th On the muscular fibres, producing, 1st preternatural Activity, 2d Indisposition to voluntary motion, 3d torpor and Languor, also producing virtability &c 5th on the skin producing itching pimples & a brown colour, when moderate produces moisture perspiration & sweat; but when in excess preternatural dryness &c 6th on the Stomach increasing the appetite, its secondary effects are a diminuction of appetite &c 7th Increase the venereal appetite 8th it induces a tendency to putrefaction in the blood 9th It gives the humours in the body a centrifugal determination, as in Bubo Glandular swellings &c 10th it increases the excretion and secretion of bile and more acrid which corrects the tendency to putrification in the blood mentioned above, 11th it favors the production of the menses, 12th it effects the eye sight producing Gutta Serena Opthalmia &c 13th it weakens some of the operations of the mind by producing debility it blunts renders dull & weakens the operations of the mind, but strengthens the imagination, heat effects the mind first with sprightliness afterwards irrasibility, heat weakens the sense of taste it effects hearing, In the bowels it disposes to Cholera & dysentery the urine never indicates scarcely any change at the Crisis of fevers in the We Indies, 14th it lessens the density of solids, 15 it is less friendly to old than to young people, hence the practise amongst the inhabitants of changing a cold for a warm climate when they become

fairer people are the less blessed

yet here

dear.

Lack of faith to delicious

Queries, are less merited in

heaven

here ~~nets~~ differences by Prep- sike

in Life —

-old. By this means they prolong their lives 8 or 12 years ——

The Relative effects of heat. When the system has been exposed to cold, it is acted then upon more forcibly by heat, Warm winters are followed by unhealthy springs hence the propriety of the old saying "that a green Christmas makes a fat grave yard" Weather becoming temperate after being very warm, produces diseases by checking perspiration, Autumn preceded by very warm summers are often attended with bilious fevers Inflammatory fevers seldom fail to follow heat when preceeded by Cold, the body suffers less by passing from the extremes of heat to cold than from cold to heat, heat when long applied, produces insensibility to cold as well as to itself. The falls of 1793 was preceeded by a warm dry summer, No climate necessarially unhealthy, but they are made so by the intemperance &c of the inhabitants, for it is ascertained that dress diet drink, the passions &c have a great influence over the bodies, Uniform dry weather seldom induces disease, only when succeeded or preceeded by moisture, thus diseases are produced in one season and generated in another, Upon the whole I conclude that wet seasons are generally healthy & that most diseases are induced by the transition from Cold to heat & vice versa ——

Of Cold. This has been erroneously supposed to act as a stimulant upon the system, It effects are negative, It acts only by the abstraction of heat, That it is a sedative I infer 1st from the general debility it produces, 2d from the slowness of the pulse & weariness ——

the breathing apparatus
has ~~[illegible]~~ heat to cold
there near tissue
unless tend to make the air
more useful

1st
2nd
4th

the heat is greatest when
combined with mouth
it acts in two ways

1
2

habit accustomed the breathing
of it heat
the effects of heat is felt more
by old people and children

3d from the operations of it being similar to those of other debilitating causes such as bleeding, Purging &c. Is the pulse slow in Pleurisy & Fever &c. it is from depression, It is raised by bf.! so it is by an abstracting excess of stimuli, It is raised by emetics? so it is by the abstraction of the excess of stimuli, Cold acts by inducing direct debility or debility from abstraction; heat by inducing direct debility or debility from action, upon the application of Cold part of the heat is abstracted, hence the apparent tonic power of Cold, when our bodies have been debilitated by heat

The Effects of Cold 1st upon the arterial system by inducing debility or increasing excitability disposes the system to all kinds of diseases 2d Upon the nervous producing a dullness of sensation, 3d upon the muscular producing langour debility &c. 4th it invigorates the appetite, hence the Germans are notorious for their warm Stables that their horses may eat the best 5th it weakens the Venereal appetite 6th it increases considerably the discharge of Urine, 7th It unfavourable to size 8th it opperates with other causes in producing Scurvy 9th It disposes old animal sores to bleed a fresh 10th it is unfavourable to vision 11th it in a certain degree produces paleness of the skin in a greater redness & in a still greater a purple or dark colour

the Camp; from the north
Sheet –
the trulice of a piece Land.
heers 40

destroy
Southern
Church

12th Acts powerfully in sleep, hence most diseases attack us at that time
13th Acts more powerfully upon Old than upon young people, hence we hear of their being found dead with their children by their sides a-live, Case of a woman who was found dead & her child alive at her breast - weather uniformormly cold is healthy, In Canada diseases of all kinds are locked up & they are only let down when heat succeeds or proceeds cold, Heat succeeding cold produces diseases, the spring of Russia produces fevers of a peculiar kind & our falls also & thus the diseases of Cold climates are generated in one season and produced in another & vice versa, Heat does not produce cold after the long application of Cold because the vessels become torpid and are not able to react, Cold produces diseases in Northerern Climates when warm dresses and houses are not used, the sudden transition from heat to cold does not necessarially produce disease or vice versa - more care and attention in accommodating ourselves to the weather by dress diet drink &c would prevent disease, Middle latitudes are not necessarially unhealthy tho' they require more care and attention to bed Cloths & dress, the Chinese change their dress, 2, or 3 times a day in order to accommodate themselves to the weather, Cold feet induces Catarrh 9/10 of all diseases of the system are received into it by the mouth or feet by their avenues

Cold acts more powerfully on the system in the sleeping than in the waking State hence 9/10 of our diseases are taken in in the night, Cold acts more powerfully when the stomach is empty more powerfully on drunkards than on sober people, because the first are very much debilitated when not under the effects of some stimuli, Cold as I have said is the preparatory or predisposing cause of all diseases, more suffer from it than any other cause in nature, not only man but animals In short their is not a greater enemy to the health & life of man than cold, The spring & autumn between the degrees of 35 & 50 are the most healthy, Heat & Cold acts differently in different months

The Effects of Wind

in producing diseases, winds are hot cold dry and moist, they are dry from the west and moist from the east, the body is immersed within them, Sudden changes more certainly affect the body when accompanied with high winds, They produce certain changes in the mind, as the Sirocco & Samiel winds, They act more powerfully upon invalids than upon healthy people, Not only winds but their absence produce diseases

The Effect of the Rarity & Density of the Atmosphere

Sudden changes from rarity to density & vice versa is very pregiudicial, air highly rarified produces numerous diseases, great muscular weakness, difficulty of breathing quickness of pulse, profuse sweats, sickness of stomach, sleepiness, an aversion to

to ardent spirits & a great pain according to Mons Laurone, these effects are attributed to a more rapid combustion of azote, or a deficiency of Oxygen, Barron Humbolt who ascended the highest mountain said it produced a Hemmorage from the nose eyes mouth & by his Eudiometer the Oxygen descended to 18 parts in the 100. Air too dense is very hurtful to Asthmatical or consumptive Patients.

Impregnations of air, We come now to consider the impurity of the air as the remote cause of disease

1st Marsh Effluvia, or as Dr. Mitchell has called them Coine Miasmatic Exhalations, For the production of these two things are necessary viz heat and moisture, the Thermometer should stand at 60°. When the ground is covered with water no exhalations can take place, In like manner when the heat & draught is so great as to dry the Earth no exhalations can take place, but when there is not a sufficient quantity of rain or heat either to overflow or dry up the surface of the ground then the exhalations are produced, The summer should be moderately moist to produce miasmata. — Heavy rains have sometimes produced miasmata, by washing off the green covering that is sometimes found upon stagnant waters & which prevented the Sun from acting upon them

without which the miasmata could not be formed, these effluvia arise partly from animal & vegitable, but more generally from the latter The following begitable matters produce these marsh effluvia, viz Putrid Cabbage Potatoes Turnips, Peppermint Onions, aniseed Carraway seed confined in the whole of a ship, Coffee cotton, hemp flax straw old books, old paper money & the timbers of an old house, Log houses the second year after they have been built, in consequence of the Putrifaction of the bark, green wood confined in Cellars, green timbers of a Ship also air stagnating in the hold of a ship & cellars & stagnated waters when agitated produce miasmata Fevers are not so often produced by animal as begitable effluvia, there are however a few which are produced by the former ——

2d Human Effluvia or Idio-miasmatic exhalations of Dr. Mitchell, these are produced from want of cleanliness, dead bodies raw hides &c. Miasmata acts first upon the stomach 2d Upon the intestines, producing Cholera dysentery &c 3d upon the liver increasing the secretion of bile, imparting to it viscidity and bilacrimony 4th upon the blood vessels producing yellow fever, Intermittant and remittant Jail Typhus or low Chronic fever & Febriccula or inward fever Hæmorrhagis &c on the brain Kidneys & spleen more particularly this last producing an Inflammation or Induration in it ——

induration in it called Ague Cake, 6th Upon the nervous system 7th upon the nervous system producing convulsion &c 8th on the Lymphatic system producing glandular swellings & 9th on the Eyes producing Optalmia &c 10th upon the skin producing Carbuncles eruptions &c The human effluvia are of two kinds from excreted and secreted matter; Miasmata, persons long accustomed to the miasmata are but little affected by them, hence the natives of sickly Countries suffer but little and perhaps not at all from the action of the same miasmata wd in new comers produce formidable diseases and death, Miasmata frequently does little more than give a predisposition to disease in one summer & in the next summer acting on this predisposition diseases are induced, The diseases produced by marsh miasmata are not contagious, the are incapable of generating themselves, these miasmata has been carried 9 miles by the wind, strange as it may appear it is nevertheless a fact that the existence of these miasmata have been called in question because the Eudiometer does not discover that air impregnated with this is less pure than air generally is; as well might we deny the existence of a spirit because we do not see, it may exist in the body 20 or 30 days without producing disease sometimes even 6 months Effluvia are more injurious to health in the morning—

& evenning than in the middle of the day, They are a source always of disease & are assisted by the following circumstances, Uncleanliness confinement in large crowds low vegitable diet, scanty & putrid animal diet, mixing of strangers together, great prostration and grief of mind; all these predispose to disease, Cold weather is favorable to the spreading of Contagious diseases, in consequence of the houses being shut up very close in order to keep the cold out wollen and other clothes spread & retain contagion, wood also, walls if white washed will not retain the effluvia of a Typhus Fever, Effluvia acts more powerfully upon the System when in a debilitated state, Pregnant women often escape the yellow fever in consequence of the stimulous of distention from pregnancy also persons affected running sores escape it, Persons are capable of affecting themselves with miasmata, Persons highly charged with miasmata may affect others without being affected themselves

Human Effluvia, The jail fever & plague & in some instances the scurvy is produced by the Idio Miasmata exhalations dysentery also not unfrequently proceeds from it, also influenza & Catarrh, It is different to tell what is in the air which constitutes an Inflamatory constitution of the atmosphere, but certain I am that such an Inflammatory constitution does exist often

since imagined that it depended on the air being Super oxygenated, but late experiments of the Chymist have proved than the portion of the oxygen in the air is the same when the inflammatory constitution prevails as at other times, human Effluvia affect first the blood vessels 2d the brain with delerium 3d the Glands, 4th Produces dysentery 5th Intermittant & malignant fevers, 6th Scurvy & catarrh & lastly influenza, human Effluvia are often combined with marsh miasmata in producing bilious fevers, these are seldom conveyed more than 10 or 12 feet from the body. No climate or Country necessarially unhealthy, for fevers depending upon the human & marsh miasmata are owing entirely to the carelessness of man, were we to take the necessary precautions to drain our meadows of the impure stagnant waters to remove all putrifying matter from around us & keep our persons &c clean these mortal distempers would cease to affect the human race, they are like the vermin sent us as a reward for our lazyness and folly, The Jail fever is rare in the U States because there is not so much poverty & filth among our citizens for these are the causes which give rise to this fever in other places —

The Jail fever differs from the bilious or yellow fever in the following particulars, 1st it comes on in cold weather & is not affect by rain or frost 2d It most frequently attacks the weak & infirm, 3d The pulse is typhoid the blood vessels being ——

affected with but feeble degree of action, 4th It continues for 20 or 30 days 5th It is propagated in a different manner by the excretion & perspiration, there are two species of contagion as I shall say hereafter, the one from a secreted & the other from an excreted matter, from all the excretions but especially the perspirable matter the Idio miasmata proceed — the yellow or bilious fever is distinguished by the following particulars, 1st by its attacking in warm weather 2d by coming on suddenly, 3d by attacking principally the young and robust 4th by remissions and intermissions, 5 by the increased secretion of bile 6th as its being of a shorter duration as 5 or 7 days, but it now and then runs on to a chronic state from 20 to 25 days 7th by its being destroyed by cold & heavy rains — the human or Idio miasmatic exalhations and the marsh or Coino miasmatic exhalations affects the blood vessels in all the seven forms of fever, bez The Bilious, mild bilious, remitting, intermitting, Typhus, Typhoid & Febricula —

3d Source of Aid Ad, Phlogiston or air rendered impure by respiration &c persons affected with Phthesis are greatly oppressed by this disease, 2d air is unwholesome when mixed with fumes of Sulphur or Charcoal, 3d air of certain manufactories as Lead, Arsenic & when they are volatolized, 4th after Earthquakes the air has been observed to be very disagreable, especially after-

one that happened in Jamaica on the 17th of June 1692, 5th The Sirocco or Samoiel winds, 6th winds that have passed over a hot sandy country 7th the air of certain mines, If birds fly over the lead mines of Scotland, they are immediately killed on the days of work but on a Sunday when the labourers are at work they may fly over with impunity- Hence we may learn an important lesson that a remote cause can seldom be able to produce a disease without an exciting cause & in the Yellow Fever, I have never seen a case in which I could not trace the disease to some cause or other which excited it into action, after having thus treated of the impregnations of the air & their influence over health we will proceed to mention the effects of

Situation over health, New Countries are generally healthy untill the trees which exclude the action of the sun are partially removed, From the time of clearing untill cultivation takes place it is sickly, The wood choppers in the cedar swamps of Delaware & Carolina enjoy good health while the trees are standing, but after they are cut down & begin to putrify by the solar influence, health abandons the labourers. Towns are more sickly than the Country, The atmosphere, impure exhalations from innumerable scources & the increased heat together by the begitables being forced by manure

Vitiated putrefying sonce are the causes of Cities being more unhealthy, Country people are more predisposed to Dysentery from their rapid begitable diet, Bilious fevers, Typhus mitior Consumption &c are more frequently the products vitiated City air than of Country A Collision of air is unhealthy as the air upon the sea shore It has been computed that 3 or 4 die in towns for one in the Country, Sandy soils, are unhealthy, vicinity to towns, or marshy grounds one great scource of direase, Vicinity to desarts & ponds these last may be remedied by having trees planted around them, a Mountaneous more healthy than a Low situation, but there is one exception to this, viz When the miasmata arises from the bottom and neighbourhood, Other local circumstances affects the healthiness of the ~~system~~ situation, viz residence in Cellars more unhealthy than rooms above ground in Hospitals Houses situated so as not to receive the action of the sun on every part, are not so healthy as those build on a contrary way Dwelling Houses often a scource of direase from the raw materials stone when recently taken from the ground of which it is made, This is prevented by previously soaking the timber in water, by which means the sap is discharged also by being built with stone well seasoned, from vapours from new plaister and paint, Hence the wealthy romans never ocupy

a house for a year after it was built, A house is rendered unhealthy from age, for the wood when old exhales a vapour which produces intermittants, also from being too much confined by trees or being too hot or too cold - from the water used in families are sometimes rendered unhealthy, by moisture of cellars, by small smoaky rooms, want of cleanliness &c. ——

I knew two cases of malignant fevers which proved fatal near Zacherys court in this City & none of the neighbours affected with it secondly I also knew Heads of families die of this disease in Arch street when none of the neighbours were in the least affected, these probable originated from something impure in the cellars, or from some other local cause, 3d Lastly a fact more proper to our subject related by Van Swieten, viz that the whole of the students together with the Professor of a certain University were diseased when none of the neighbours were affected, this probable arose from some exhalations from privies & cellars or some other local cause ——

Change of Situation over health, 1st Persons changing a cold for a warm climate are frequently afflicted with fevers, 2d persons leaving a sickly neighbourhood & coming to a City are afflicted in the same manner, the miasmata being in this case previously received into the system —

are excited into action, in consequence of the many exciting causes in the City & the system thereby becomes diseased, 3d Old people leaving a cold & entering a warm climate often become more healthy whilst the same change of climate in young people produce inflammatory complaints, 4th Removals from marshy to airy & dry situations often contribute to health, except in old people, who often suffer by this change, since it deprives them of a customary stimulus by the marsh miasmata, which on a former occasion were said to be the support in part of old age, but the destruction of youth & the middle aged, 5th Those who have made long sea voyages are frequently affected by Catarrh, on a near approach to land in consequence of a mixture of land & sea airs together (case of a sea captain with whom Dr. Rush crossed the Atlantic) 6th I have been at much trouble in trying to find out wether thunder & lightning independent of the change of air had any effect upon the system in producing disease, but I have not been able to collect any thing certain on this subject, I knew a Lady who could tell the approach of a thunder storm by a giddiness & head ache which she always experienced some time before and continued untill the storm was over, some persons appear to be born with the fear of thunder, A Lady in this City some years ago, in consequence of her dread of thunder would during the continuence of a thunder

storm shut herself up in a dark room & drink an immense quantity of Spirits without being intoxicated in the least at other times she did not discover the least attachment for them, Excitement and Excitability were either so suffocated that they could not act or were suspended in this case ——

Leeches appears to be sensible of the change of weather by their motions, Mr. Cowper informed me that he could always foretel the approach of thunder by certain motions made by the leeches, which he kept in his house 7th Sound appears to affect some persons, a Lady in this City has always sweats, chills, tremblings, & the appearances of great terror on hearing the noise of a Carriage, Deafness has been induced in two cases to my knowledge in consequence of firing of cannon and even death, Birds have dropped dead from the firing of a cannon upon the deck of a Ship, We will now consider the effects of the heavenly bodies upon health ——

1st Of the Sun We have already considered in what manner the heat of this body by warming the air operates on the system We will now consider its light abscence &c, an excess of Solar light in cold countries the reflection of the Sun upon the snow proves very hurtful to the eyes, sometimes produces blindness & Inflammation, while its abscence produces temporary blindness from a want of Stimuli ——

both which are called Nyctalopia wether it depends upon an abundence or deficiency of light, Even the momentary absence of the Sun has produced alarming symptoms in the yellow F. Most diseases attack at night and death most frequently at that time it has been ascerted that 3/4 of mankind die at night, may this not be owing to the absence of the Sun —

2d of the Moon, The influence of the Moon is felt by all animated nature, even the tides are owing to its influence vegetation is measurable under it, Death occurs more frequently at the full and change of the moon than at any other time of it, The paroxisms of many diseases seem to be influenced by the moon, Dr. Morely relates the case of a British officer who was regularly attacked with homoptysis, I have seen it in two cases, about the full or change of the moon & at no other time, I know a persons affected with the gout in this place always to have the inflammatoon paroxysm on the full or change of the Moon, The moon affects the nervous system also madmen, hence this term Lunacy, It affects the tranquility of the mind hence a Lady observed her husband to be more petulant on the full of the moon, Epilepsies & Asthmas appear to be under the influence of the moon — Parturition appears to be hastened by the full Moon —

Worms are more troublesome in the bowels of Children at the full & change than at any other time Suicide appears to take place more generally about the full of the moon than at any other time, Hypochondriac & Epileptic patients appear to be very much influenced by the full & change of the Moon, Dr. Darwin has remarked that Apoplexies & Palsies are more frequent at the Equinoxes, Dr. Haller speaks of a person who felt the calculus in the bladder more sensible at the change of the moon than at any other time, Chronic diseases yield less to the influence of the moon than acute, perhaps from the operation of the medicine keping up the excitement, Eclipses of the sun and moon have great influence over the system, during the Eclipse of the Sun on the 16 of June 1806 the lunatics in the Hospital were remarkable silent for three hours, Bera died at the instant of the Eclipse of the Sun, a more remarkable fact is the following, 14th British soldiers were attached the moment of an Eclipse with Intermittants if the Eclipse of the 16th of June had appeared in the autumn, when persons were predisposed to disease, it is highly probable that diseases would have immediately have been produced, The diurnal rotation of the Earth appears to have great influence in regulating diseases and probable induce them, The pulse varies with the different changes occasioned by the Earths revolution, for instance it is slow in the morning quicker at noon & slower again at —

Question. how do you divide Contagious diseases

answer. into Epidemic. Endemic Sporadic & Intercurrent

night, &c Dr Darwin has happily called the Evening the Autumn of the day. It is important to keep these changes in mind, since they will be of great Practical use.

Of Contagious Diseases, These were formily thought to be very numerous but they are now known to be much more limited, They are divided into Epidemic, Endemic, Sporadic & Intercurrent, Contagious diseases are received into the system, by means of the lungs, Saliva, Nerves & skin, they are sometimes specific contagious, from particular parts of the system being affected only as the small Pox, Chicken pox Hooping cough & measles &c The Lues venera, Itch Ring worms & diseases of the skin differ from the small pox & in being communicated only by contract, also in their originating from a fixed and the small pox from a volatile matter, Specific contagious diseases, act without an exciting cause whilst the yellow fever & such like diseases which I only consider as epidemics, scarcely ever take place without an exciting cause, Endemic diseases are such as affect many people together in the same place or Country & originate from some local cause Notwithstanding what has been said to the contrary I believe the Endemic Yellow fever to be an of the United States as well as of the West Indies, Sporadic diseases are such

affect a few only at the same time & place ——

Intercurrent diseases are such as affect a few persons here & there without regard to place or time, ——

I exclude from the orders of Epidemics all the diseases produced by Idio miasmata exhalation, the fail fever never spreads as an Epidemic, Epidemic diseases are such as attack sometimes in scouting parties but more generally with great pomp & violence. They attack such an immense number of people at the same place & time as if they were going to destroy the human race, but they can be prevented repelled & vanquished by the power of medicine Epidemic diseases arise altogether & invariable from the insensible & foreign matters in the atmosphere produced by Coino miasmatic miasmata exhalations & are small Pox, Influenza Cynanche &c The Cynanche maligna Scarlatina & Influenza may be properly called diseases of the atmosphere, I will now deliver a few laws to which Epidemics are subjected ——

1st They are influenced by the sensible qualities of the air, the influenza exempted, the small pox for instance is more violent and the measles & the Scarlatina Anginosa still more so in the summer than in any other season ——

2d They are influenced by Provisions & drinks of the season while fruits, for instance, are used, the disease is thrown upon the Interstin

3d. No two Epidemics produced ~~produced~~ by different causes & of unequal force can affect the system at the same time, I would as soon believe a horse could trod & pace at the same time ——

4th When 2, 3 or 4 Epidemics appear at the same time & place they all blend their symptoms together & one of them predominates over the rest & appears to make them pay homage to it, by wearing its livery for there appears to be a monarch in this disease, Therefore Gentlemen take care in all your prescriptions to have an eye to the reigning Epidemic, Hence also we see the reason why broken legs or any other external cause produce malignant fevers, when the system is previously disposed to it, A Young gentleman left this City in time of the yellow fever to avoid it and on his way to Germantown was thrown from his horse & had his leg broken he was very soon seized with a black vomit & died in 5 days ——

5th The more powerfull & reigning Epidemics do not only exact homage from the weaker but chase them away, Dr. Sydenham tells us that the plague in London in 1665 drove away all other diseases from the City ——

6th the tyranny of great epidemics is lessened before their departure, Hence the small pox drove away the Plague from Constantinople, & the measles chased away the small pox from this City, The first appearance of an Epidemic may be compared

to a Savage that attacks & destroys Men women & Children, but when retiring to a civilized compass of men who spare the blood of the innocent, It is in this stage only that other diseases can take place

7th They appear in a variety of forms & Characters, 1st as in the malignant bilious, remitting inflammatory intermitting fevers &c. and in three different forms of small pox, viz that with & without pustules & the confluent, 2d they appear in different forms in different years & with different prognosis under different circumstances, 3d The same causes sometimes produce diseases of different forms & appearances but still disease is an unit

8th Epidemics vary with respect to their violence in different seasons & persons & even in different days

9th Some epidemics require exciting causes, whilst others such as the small pox &c do not

10th They come on sometimes with great force & violence & suddenly vanish in consequence of frosts & great rains washing away the cause that produced them

11th they differ in different parts of the Country, the same Epidemic appears in one place perhaps in the form of yellow fever in another of remitting fever or common bilious Autumnal fever, In a 3d part of the Country it will probable assume the shape of a bilious Cholic or Dysentery

The same Epidemic sometimes affects different people of the same City from a difference of temperament, This in Persons of the Sanguineous system for instance it will appear a violent fever, In those of the alimentary temperament, it will fall with all its force upon the bowels &c

They are perpetually varying & consequently no uniform mode of treatment is to be pursued, their changes must be attentively watched & your remedies adapted accordingly, this compels a Physician to be a student of Medecine as long as he lives, the same remedies which will cure the same Epidemic one year will kill the next

12th They are often limited to small bounds,

13th They affect people of one nation or colour often, whilst others of a different color & strangers escape it, In 1793 the Frenchmen & negroes escaped the fever of this City

14th They sometimes attack persons of a different age particular Moses speaks of a Plague that carried off many Children only

15th They sometimes affect persons of a particular sex only, A Plague in Italy once carried off 6000 Men & scarcely A woman

16th They sometimes affect persons of a particular rank only In France 1757 the Dysentery attacked only the rich & the Plague in 175 attacked none but the poor

17th They sometimes affect members of the same communities & families only

18th They sometimes affect all nations, all colours, all ages, all sexes at the same time & place

19th Sometimes they affect the human species only

20th They sometimes affect the human Species together with Cats dogs Sheep horses Cows fish and all others of the brute creation

21st & lastly it must be observed that different remedies must be used in the same Epidemic, in different seasons & under different circumstances

Of the different Phenomena that have been known to precede & accompany Epidemics

1st Hot, Cold dry & wet, windy, weather with rain sometimes precede an Epidemic

2d Weather perfectly calm, so much so that the leaves of trees were not seen to move & which authors have called "Fine Aura" Dr Wilson of Morris town relates the case of an Epidemic which was preceeded by a long calm & smokey vapour, the white paints of houses changed to a Yellow colour in the Y P. of Boston

3d Diseases which preceede Epidemics are more violent than at any other time, The diseases which also follow always partake of a more violent for or are more Chronic

The Pleurisies which have preceded & followed the Yellow Fever have constantly required more Copious V.S. and purging than Ordinary 4th. Cats appear to be affected in a peculiar manner previous to the appearance of an Epidemic, Birds have been observed to be more scarce & even die in their Cages during the continuance of an Epidemic, Insects are more previous to or during the time of Epidemics, but the House Fly is an exception to this, for at such times the mostly disappear —

5th. Many trees emit a peculiar disagreable smell, drop their leaves & sometimes die

6th The Pulse is preternaturally slow or weak or frequent during the continuance of an Epidemic, at one season the Pulse was preternaturally frequent, There is Langour sickness of stomach &c. Persons who were in good health became sickly in consequence of it, but sometimes it happens that others who were debilitated previous to an Epidemic have became quite healthy in consequence of it, the miasmata in these instances excited them up to the healthy point, Oyster & Fish live a much shorter time during an Epidemic, The clouds affected the Patients in the Y Fever at Charlestown by obscuring the Sun, Whence these changes? 19 out of 20 diseases are derived from the Changes of the atmosphere If Epidemics are changed by so many circumstances —

they should be observed with a Spy Glass & Mycroscope every day —
Some persons have supposed Epidemics to be a curse or a Judgment upon them, Reason not only rejects but loathes such nonsence —
Let Old women & Children who assemble around a Kitchen fire to hear the tales of fairies & Hobgoblins believe this —

Thus Gentlemen I have delivered to you such facts as I have acquired from observation & experience, during my life & think it here proper to observe, that it is the duty of a Physicians to be students as long as they live —

Aliments & Drinks as productive of disease, this is an important part of our Pathology, I have said before that $\frac{9}{10}$ of all diseases are received into the system by the Mouth & feet

Aliments produce disease by their quantity and quality and 1st of their Quantity, When great disease is produced by an over distention of the Stomach & by affording to much nourishment to the System, The effects of two much nourshishment will be in proportion to the exercise taken, To much nourishment disposes to all the diseases of Plethora as Apoplexy &c paving the way for indigestion & Dyspepsia & lays the foundation for two vile practices drinking & using tobacco —

The quantity of meat should be regulated by the quality, The use of aliment is not only to nurish the body, but also acts as a stimu-

tant, A labourer can take much more food with impunity than the idle & sedentary, The quantity of food necessary for a labourer is about 8 ℔ but for a sedentary man from 4 to 6 is sufficient, Chardin tells us of a Persian who would eat 35 ℔ of water melon a day without injury, Persons accustomed to a definate quantity become sick when increased or diminished, Lewis Cornaro limited himself to 12 ℥ solid food & 1 ½ ℥ of drink per day, By adding 2 ℔ he lost his health, The diseases which arise from an insufficiency of food affect chiefly children Slaves & monks, who thro' a false sense of religion deny themselves the necessary support of Life. — Children at the breast are often diseased from the Mother not affording a sufficient quantity of Milk, since they are unable to live upon any other kind of food, Diarrhea Dysentery &c. follow, stimulus of the desire of food & life causes the increase of strength, Slaves are often diseased in consequence of having small allowances & by being made to labour hard by cruel & unthinking Masters, Hunger appears to increase the strength. — Hunger is said to have great effect upon the temper, hence it is said to break down stone walls &c. before it, It was in consequence & furiousness of temper, that was supposed to follow hunger that the Duke of Marlbourgh used to say that he preferred Scotch men when hungry Englishmen when full & Irish—

Question does Famine increase the excitability -
Answer. Yes - and makes the breath very acrid
Question how many kinds of Aliments -
Answer two. Animal & Vegitable

Wild meat is the better than tame
~~th~~ its makes a person not so strong but more
active - - -

a diet solely upon animal food produces many
diseases as Lice. Leprosy. fœtid sweats Scurvy &c.

Men when drunk for immediate engagement ——

Famine increases the excitability of the system, excites pain in the stomach, renders the excretions and secretions acrid & hemorrage from the stomach delerium & death closes the scence ——

Dr. Franklin used to relate the case of Benjamine Day of this state who attempted to fast 40 days in imitation of our Saviour during this time the Dr. visited him & found his breath so acrid that upon shaking hands with him it drew tears from his Eyes

2d. Of the Quality of Aliments, There are Animal & Vegitable, 1st. of Animal Aliments which are the following Fish, diet solely upon fish produces Lice Leprosy Itch Diarrhea & dysentery, food wholely animal produces foetid sweats Scurvy &c. & the animal food of Carniverous animals this effect in a much greater degree than when it is from Herbiverous. —

A great degree of difference between the effect of Wild & domestic animals, the former being much the most wholesome, The Indians who Live almost entirely upon the wild are exempted from almost all the diseases to which we are subjected, They are not however so strong but more active than those who Live upon domestic animals. — Animal food produces diseases when much exercised before killed, an Instance of this kind occured some years ago, A farmer killed a Bee after how

Question, What diseases does a diet on Vegitables produce

Answer. many. Diarrhoea, Gout, dysentery dropsy

Lessens the venereal appetite & size of the Body

Question are some supposed to act specifiraly

Answer Yes – Beans to flatulency, Oats cutaneous

diseases, Chesnuts to mental debility – –

Question, does the preparation in cooking affect

their digestibility – – –

Answer Yes

ing worked him very hard & sent it to market, the result was out of 15 who eat of it 14 died, Animal food produces disease when putrid.

2d Of Vegitables Aliments. Nothwithstanding persons in warm climates live upon them yet in other climates they produce disease wholly vegitable produces Diarrhea Dysentery Dropsy, costiveness a disposition to gout, lessens the heat of the human body impairs the veneral appetite, lessens the size of the human body &c Some are supposed to act specifically as Beans which produce flatulency, hence the reason why Pythagoras forbade them at his scool. Oats are said to produce cutaneous diseases & Cherries when green are said to dispose to mental debility. Many other circumstances independent of the quality and quantity of food influence their effects upon the system

1st Preparation of aliments in cooking materially affect their digestibility oysters when over done have produced colic sometimes death, Milk in its simple state disagrees with many stomachs, a supper of toasted cheese has produced heart burn and Apoplexy & however taken it always disposes to Costiveness

2d food when taken into the stomach without being sufficiently masticated produce Dyspepsia &c

3d So great intervals between meals disorders the stomach

This should be avoided by carrying a little gingerbread or biscuit which should be eaten between meals.

4th Exercise or rest influence the food in the stomach the former rendering animal food harmless whilst a vegitable diet is more suitable to the latter, some Philosophers of late have mentioned ventured to foretell that vegitables will in time become the food for the human race.

5th Eating too much after fasting is a great source of disease in a convalescent state the most dangerous relapses are brought on by eating to much or taking a small quantity of animal food after having been restricted to a low vegitable diet — this is one of the greatest sources of unsuccessful practice, when families in Europe travel for health, they are sometimes attended by a Physician who regulates their diet chefly &c & the benefit derived from such a custom is considerable.

6th The sudden change from vegitable to animal diet or vice versa is very injurious to health.

7th An improper mixture of aliments is likewise very prejudicial to health, see Inquiries Vol 1st / however it is best to advise patients labouring under chronic diseases to eat of one dish only at his meals.

8th Food taken into the stomach to hot or to cold produ-

Question. does food immediately produce disease as soon as it is taken into the stomach

Answer. No. it may remain weeks days Months

as an inflammation of that organ &c Mr Reid died at New York in consequence of eating creams.

9th. Novelty in articles of diet often produces diseases & that to when the new diet is taken in small quantities, water melons peaches &c are not received into the Stomach in the beginning of their season without producing some unpleasant symtoms & sometimes disease, It appears in this case that the stomach forgets these old acquaintance, but upon recognizing them renews her cordiality, The stomach sometimes remembers her enemies & scarcely even becomes reconciled to them, Some years ago a single Boiled Chesnut produced a vomiting in me, owing to a great sickness experienced from them when I was very young

10th. Food may remain a long time in the stomach before it shews it pernicious effects, I once knew a Lady to be made not untill the 3 day after taking some toasted cheese into the Stomach, I gave her an emetic by which discharging the offending matter soon relieved her, Dr Haller says he has know food to remain in the stomach from 1 week to 7 months previous to its producing disease, Hence Gent, the necessity of enquiring into our Patients food for days weeks and evens months perhaps longer previous to the origen of disease

11th Diseases may be brought on by eating food cooked in improper Vessels as Copper Lead &c the first mouthfull of such victuals takes away the appetite, Since the introduction of Silver & Iron, stomach complaints are very much diminished in number Also by filth & extraneous bodies getting into the Vessels used to convey food into the system, I once knew an instance of a whole family becoming sick in consequence of eating a baron of milk in which a spider had fallen

12th Animal food is sometimes rendered unhealthy from a peculiarity of diet on which the animal had subsisted on previous to its being killed for our food, I once families in Philadelphia were once diseased from eating a few Pheasants that had been brought from market, the Physicians universally attributed this complaint to the cause I have mentioned & these birds were condemned to be improper & poisonous, the cause of this poison however was from the Patient eating a particular fruit called the Laurel berry which is the only fruit they can get in Winter & is known to give a temporary poison to the flesh of these animals as well as to the deer & some few others, I once knew 60 Students at princeton college to be affected with a Diarrhea from eating a Pye made of (Poke berries (Pidgeons) which had chiefly subsisted on

Question what diseases, will to much Vinegar produce Answer Gastrodynia Cholic, and a disposition to Gout - - - - - - - - - - - - - -

13th Salt diet when well proportioned to the state of the system is not unwholesome, The reason that children living in the Country are less affected with Cholera Infantum than those of the town is owing Therefore to the salt diet used by the former whilst the Peculiar situation of the latter hinders them from any fresh food, It where to be wished that our farmers would live on fresh food in winter & on salt meat in the summer.

14th There is an Idiosyncrasy which renders aliments wholesome, or unwholesome to particular persons & this Idiosyncrasy is Hereditary.

Of Condiments as productive of disease, There are Salt vinegar Mustard Sugar & spices.

1st Salt is so universal & useful an article of diet that when it could not be obtained ashes & alkalies were frequently known to be used as substitutes, Some nations as the Brazillions & our Indians have never seen salt but they use instead some alkaline substance.

2d Vinegar is both Wholesome & proper in small quantities, but when taken in large quantities produce dyspepsia Gastrodynia Cholic a disposition to gout & a variety of distressing complaints, In 1770 it was said to take down the fat of the system & induce leanness, Some of our Ladies —

Mustard, the same as Vinegar

Question What diseases does Sugar produce
answer. Dyspepsia

that used it very profusely & injured their constitutions materially by it

3d. Mustard, The same may be said of this as of benegar, I once had a Gent & lady with a very obstinate Gastrodipsia under my care & happening to dine with them I observed that they used mustard and benegar very profusely, I advised them to lessen the use of these two articles they did so and soon recovered, Patients often suffer from large quantities of these two articles or particular qualities of food Dr. Zimmerman informs us that Frederick the II King of Prussia fell a victim to his ungovernable appetite, He was an enormous gutton, would eat a day & would take between breakfast & dinner by way of a relish a large Ale pye, He would never believe that he ate too much & when spoken too about it he would say that he ate only enough to keep soul & body together, He was remarkably fond of condiments & the same Dr. tells us that his kitchen resembled an Apothecaries shop more than any thing else

4th. Sugar nothwithstanding it is the most grateful & nourishing of all Condiments, when taken in moderate quantities, yet when taken to an excess produces Dyspepsia & Honey or Molasses when taken in an excess produce disease

Spices, large quantities Costiveness -

Tea, when in large quantities produces Gout & Nervous Complaints — — ——

Coffee, Vertigo -

5th Spices when taken in small quantities assist digestion but when taken in large quantities have a contrary effect —

We will now turn our attention to tea & Coffee of their effects, a revolution has been made in the customs manners &c. of every nation since the introduction of these articles —

Tea principally injures by being taken too strong, hence Kitchen women are more affected than their mistresses, Tea will sometimes bring on, and sometimes prevent sleep, if the system be below the sleeping point, then it stimulates & may induce sleep, but if the system be excited above the sleeping point it prevents sleep, Tea produces nervous complaints such as Hysteria &c & when taken very strong & in large quantities, also Gout, hence the reason Women are more affected than Men with Gout, as I shall show you hereafter —

Coffee is a gentle stimulous & will sometimes produce all the effects of ardent spirits, I knew a Physician in this City who always previous to his going out on a visit to his patients in the Cold, drank a pint of hot coffee, It sometimes produces Vertigo & other diseases, in consequence of which, I always forbid its use in any one of them, Neither tea or Coffee is nourishing they only become so by the Sugar & milk taken along with them —

Question. how many different ways does water produce disease

answer. 1st by its sensible qualities 2d by its being mixed with unhealthy articles 3d the quantity and time when it is taken

Of Drinks as productive of disease, These are Water Wine Beer Cider & Ardent Spirits. ——

1st Of Water it is the most wholesome & pure of all drinks but it is sometimes like the rest the cause of disease, 1st By its sensible qualities, Cold Water injures the tone of the Stomach (that is when very cold) by its sedative effects, When the system is very much heated, violent spasms of the stomach arise from drinking very cold water, The teeth are peculiarly affected by water when extreemly cold, Mr Spencer a dentist in this City informed me that he drew 3 teeth in summer for one in winter, which may be ascribed to this cause, Water moderately warmed or suffered to stand ½ an hour in the air never produces those dreadfull Symptoms, which are sometimes its consequences when taken very cold, It also quenches thirst better than when it is very cold, because this last abstracting so much of the heat of the Stomach, leaves the system debilitated in consequence of which the system reacts so powerfully that a fever is produced & water is again required to compose this fever, whereas water not so very cold produces no such effects, since the system has not to react & therefore no fever is produced ——

2d By being mixed with unhealthy particles, Water in Cities is generally unwholesome for the following reasons ——

Wine Gout

1st The filth in necessaries which are dug 30 or 40 feet below the surface of the earth generally effect the pump water at the distance of several feet from them. It was on this account that Dr. Franklin proposed supplying the City with Schullkill water. Wein water, beer, punch cider will produce spasms but not in Wine or Ardent spirits, I have know death to have been brought on by drinking Ice punch, water is most wholesome when running over rocks, sand, gravel, &c. General Wayne was affected in 1792 by two large draughts of Ice punch —

3d By the quantity & time at which it is taken, Cold water when taken at improper times injures the system, The same may be said of it when taken in large quantities, Many people injures the system by taking large draughts of water early in the morning or late in the evenning just going to bed, This practice comes on by intemperance & kept up by habit — His however a pernicious one as drinking between meals The Indians scarcely ever drink water untill evenning — Large drinkers of water are generally great gluttons —

2d Urine has a tendency to produce gout in the extremities, Here I must observe that gout in the extremeties is always produced by fermented or Spirituous Liquors, Gout may be induced in the stomach, without them —

Fever, Gout, Rheumatism

Cholera, Cholera Pestinum Rheumatism Gout & Indigestion

but I never a case of gout in the extremities except in Persons who had been accustomed to these drinks, Wine produces Gout more readily in warm than in cold climates, & has a tendency to induce costiveness when taken after supper, It is more wholesome when taken with food than without

3d. Beer like wine when taken in large quantities disposes to Gout & sometimes to Rheumatism, It has been said to produce gravel if so it is in consequence of its acidity, Dr. Haller said that out of 100 patients that died of gravel not one upon examination had been found to use beer

4th. Cyder may be drank with impunity by labouring persons, but it is productive of Gout & Rheumatism in the sedentary, I knew a Gentleman & Lady in whom the gout was always excited by it The fruit from which it is obtained is often difficult of digestion & in some stomachs productive of the same disease, If a red hot Iron be plunged into cider & suffered to cool, its tendency to produce Gout & Rheumatism is entirely destroyed, the Iron acts by obtaining the acid. —

5th. Ardent Spirits as a drink and source of disease, See Med Inquiries Vol , It may be proper however to observe here, that their effects are ~~produced~~ experienced on the Nerves & Blood vessels, Lymphatics Brain &c and also upon the

moral faculty ——— ——— ——— ———

Dress as inducing disease, Who would beleive that the dress 1st used to cover our nakedness after our fall from the primoval innocence would be so used as in time to constitute a part of our destruction, The diseases from dress arise from the quantity quality fashion of our cloths ———

1st Dress to heavy in warm weather predisposes to disease

2d Fashion is often a scource of disease from dressing to thin thick or tight, I knew a Lady who fainted immediately after she was dressed to go to a tea party from being laced to tight in her stays, I beleive a great many instances of the brain are brought on by tight cravats shirts collars &c garters by preventing the free return of blood upwards cause large knees anacarcus legs &c. ———

3d Quality of Clothing has a great influence over the system Woollen or Cotton clothing is best next to the skin 1st they keep up a gentle perspiration, 2d when wet they are not so disagreable, so cold or so productive of disease, 3d they may be worn any length of time next the skin without producing vermin provided the other clothing is kept clean, after having considered the diseases of dresses let us next consider the dresses of diseases

1st Hair powder is a dress of disease, as it was first put upon the head in Poland to prevent the disease Plica Polonica

Poisons when put into the Blood Vessels, immediately kills - - - - - - - - - - - - - -

2d. Patches in the cheek and face were introduced by some drun-
kards to hide the pimples of these parts, 3d. Neck cloths were first
introduced by Henry to hide the deformity occasioned by the
Scrofula, 4th. Boots were first introduced by Charles to hide
the deformity of his legs.

Poisons are of a relative nature, from the part they af-
fect as the vipers poisons when swallowed is innocent, some sub-
stances are poisonous for particular animals while they are food
for others, or they are poisonous to an animal in one state of the
system, while in another & to the same animals they are inno-
cent, Poisons are such substances as when taken into the system
produce disease or death, and that they act relatively is proved
by the following fact, The venom of a viper has been swallow'd
without having any effect, but when taken into the blood ves-
sels immediately kills, Poisons are not only so from their quan-
tity, A small dose of opium is an agreable stimulous, but if ta-
ken largly kills, Poisons are taken from either the animal, vegi-
table Kingdoms, mineral or Orial. It belongs however to
Natural History to point out the different poisons, It is my
province only to explain the manner in which they operate
Poisons like miasmata act by producing local inflammation
The bite of a Spider does not kill by its poinious quality

Question, how do poisons act in producing death

Answer. By destroying the part, to which they come in contact. this destroys the ability in the system of discharging its various functions and thus death —

but by exciting morbid excitement inflammation &c and then bri-
nging the rest of the system into sympathy with the affected part
2d In the Vegitable Kingdom, we have poisons, as Ne-
cotiana cicuta, Hyosciamus, Digitalis, Laura Cerasus, Datura
Stramonium, Monkshood, Dropwort, Buckwheat so nourishing
to man, is a poison to some animals, others are less dangerous as
the Cashew nut which acts only upon the skin — — — —
3d Mineral poisons are arsnic &c ——
4th Arial, are arial acid napthe, samoriel & Samoon winds
and the different kinds of air fit for respiration — —
Poisons have been supposed to act by destroying a certain some-
thing called the living principal, but since we have denied
the existence of such a principal, it becomes us to account for its
operation in another way, we said that the functions of the sys-
tem were kept up by certain stimuli acting thereon, In short
life is a forced state, & consequently the way we account for the
operations of poisons is, that they destroy the parts to which they
are immediately employed & thereby destroy the ability in the
system of discharging its various functions, They produce in parts
whose motions are essential to life an inability to perform
those motions & thus death — They act on different parts &
are fatal in proportion in proportion to the part affected.

When they act on the Brain & produce death, they are taken in by the mouth & destroy the excitment of the Brain. They produce this effect in the same manner that a string tied round a Ball or a peice of wax placed around the string of a violen, prevents the emission of sound from either of them, Poisons act specifically 1st on the mind, 2d on the Brain 3d on the lymphatics, 4th on the Nerves, 5th on the muscular system, 6th on the sanguiferous system, 7th on the skin 8th on the stomach & Bowels, 9th on the lungs 10th poisons act generally on the system as Opium. ——

Chemistry affords us examples in support of our doctrine of poisons, Mercury put upon gold destroys all its properties of ductility, malleability &c Zinc & copper are both within themselves insonorous, but upon mixture form a fine, brittle sonorous & elastic compound, Many other examples of like nature might be adduced from Chemistry, May not poisons therefore not act upon the Blood by mixing with them & destroying its vitality, Formerly we looked up for power to Monarchs & Princes, but of late we have looked downwards & found it to reside in the people, since that time we have become wise & happy, But not so in medecine, we have all being looking inwards for some invisible principal of life, but the Theory I have taught, directs us to seek for it in some external quarter

since that theory has been advanced, the phenomina of animal life seems all more plain & simple, We must now look outwards for the support of life & like the Indians with their Gods think we see them in the clouds & winds. —

There are some poisons which do not destroy immediately (these are generally from the vegitable Kingdom) but by a long and linger-ing illness exhausting the Patient, thrust him insensible as it were out of the world, This is the way I explain the action of those pois-ons used in the Southern States by the Slaves, to extinguish the flame of life in their Masters or Mistresses, The miasmata which produces Yellow Fever sometimes kills instantly but it never the-less may & often does, bring on Chronic disease, There are frequent instances of persons who have been poisoned arriving again to perfect health, Even arsnic itself sometimes yeilds to the effect of the system to recover itself. —

Of Foreign Matters introduced into the system as pro-ductive of disease —

Worms from their universal appearance in all animals I am led to believe, that they serve some use in the human body and that when disease is produced by them, it is either by their being in to large quantities or by their getting into some improp-er place, They are found in almost every part of the human

body, in the Liver Bladder Windpipe Frontal & maxillary sinuses, Brain & alimentary Canal, The different kinds of worms are the Lumbrica or round worm, the Tenia or tape worm Ascaradies & the Ground worm, These may be taken into the system either by aliment or may be generated in it, I am induced to beleive that only the Lumbrici serve any good purpose in the system & this may be by consuming the superfluity of aliment, The effects of worms are seen more in the fall than in any other season of the year, Children are more subject to them than adults, some nations are more subject to them than others, the French Germans & Italians more so than any other nation, Worms produce diseases only by their quantity or by their being misplaced, They have no effect upon the blood vessels, hence you see I deny the existence of a worm fever, From what I have said Gentleman, you may suppose that I think there are few worm diseases, I wou'd by no means inculcate such an Idea, I beleive that there are few diseases of Children but what are more or less owing to worms or accompanied with them, I seldom therefore advise medicines in Chronic cases of young people, without at the same time having an Eye to worms ——

Of Anomalous or extraneous bodies introduced into the system Stomach Lungs Nose skin &c as productive of disease

Powder Dr. Rush is speaking of this says an officer had powder in his skin 20 years and it then flashed as well as powder as had just been made —

I have known death to be induced by swallowing a Cherry Stone. —
Copper taken into the stomach produces distress nausea &c. I
knew a Lady who swallowed a water melon seed, which went the wrong
way, a violent cough ensued, but ceased as soon as the seed was dis
harged which was much enlarged, Children frequently push grains
of Coffee &c. up the nose, the consequences of which are very bad since
they often tend to bring on Polypus —
Pins often produce disease by being introduced into a part &
not & not immediately extracted, I attended in consultation a
Son of Mr. Morris, with a sore in the groin which was not benefited
by any thing, untill a pin was drawn from it by Mr. Burke
a Member of Congress & then it quickly healed, a Lady in this
City had a great pain in her virginia for some time, Lower after
a time she discharged a pin from that part & was soon brought
to her usual state of health, Wounds from nails &c. especially
in tendinous parts often induce tetanus —
Shot, bullets & Powder frequently produce disease after having
remained in the system a long time, I knew a young man who
was affected with delirium every two or three ~~days~~ years which
had been lodged in the bottom of his feet when young, Splinters
are frequently the cause of disease, I attended an officer about the
time of the american revolution, who had a pain in one of

" They were taken up by the Lacteals —

his legs, in consultation with another Physician, We both agreed that he had the gout and treated it as such, Some days after this there came from the place of pain a splinter of about the ⅛ of an inch in length which had been thrust into his feet some years before. ——

Paints Powder & Pomatum are frequently productive of disease such as head ache &c ——

Retained excretions are productive of many diseases — Fæces when retained for any length of time are very injurious. — Their effect however are different upon different persons, Many people go a long time without suffering any inconvenience from the retention of their Fæces, particularly Sailors, I knew a sailor who went to Lisbon and back again without having a single passage during the whole time" Dr. Haller believes the great longevity of birds depends of their readiness to discharge their Fæces, There are many instances of persons going a week month & even more without a Fæcal discharge but in general it disposes to many diseases 1st Dyspepsia & diseases of the stomach 2d The piles in consequence of the Fæces hardening the intestines, 3d Colic 4th Inflammation of the intestines by their irritation 5th Ruptures as Inguinal, Scrotal & Umbilical 6th Diseases of the Brain, The most healthy time for the evacuation of the Fæces is once in 24 hours but this period may be exceeded for a short time & no disease produced

In Summer Diarrhœa & Dysentery, and in Winter Catarrh - - - - - -

Perspiration when retained produces dryness & eruptions of the skin sneezing Cholic Diarrhoea " ——

Urine long retained will produce gravel tenesmus &c

Bile when absorbed produces costiveness jaundice inactivity diseased or false vision making every object to appear yellow obstruction or Schirrus of the liver &c The causes of this obstruction are brought on in three ways, 1st Spasm 2d Calculus or Gall Stones 3d Viscidity as in the yellow fever, Semen when retained how does it produce disease? Answer it does not unless accompanied with a preternatural strong venereal appetite, then it may produce Plethora distention & thereby Hypteria Melancholy Madness & death accompanied with Priapism ——

Menses when retained produce a majority of female complaints wether of the Chronic or acute kind, The suppression of the menses produces diseases of a highly inflammatory kind, which stand in need of the Lancet instead of the Pennyroyal tea or other stimulating medecines termed Emmenagogues —

Rest & Motion as productive of disease, Rest by suppressing perspiration is unfavorable to health, Hence the necessity of imposing ~~rest~~ on man, Labor after his apostacy to earn his bread by the sweat of his brow This was a blessing in disguise, Women suffer less than men from a sedentary life

" and an other 6 months

Sleep & Wakefulness, Too much sleep produces debility from abstraction & disposes to fatiety, indigestion fatiety &c. 6 hours in the 24 are sufficient, Westly who lived to 80 seldom slept more than 4. in the 24 hours, wakefulness is a relative term & depends upon stimuli both as to its quantity & quality, The stimuli of the passions will often prevent sleep without giving injury, I knew a Card player who would sit up 2 or 3 days or nights without having any desire to sleep, Boerhave once went 6 weeks without sleep, Haller tells us of a women who passed 45 days without sleep, The want of sleep is owing sometimes to the debilitating power of Grief Fear &c. They act by reducing the system below the sleeping point, But above all wakefullness is kept up or produced by fear, The state of wakefullness is exemplified by the anecdote of Genl. Washington & the Indian Corn-planter, In answer to the Generals reply he has the following words, "Your words contained in the great paper you sent me were like the Sun in the morning in a fever sick man, which makes him glad but does not cure the pain ——

We come now Gent to an important part of our pathology viz the Passions, The diseases arising from the interlectual faculties & the venereal appetite, a gentle exercise of the faculties of the mind is favorable to health, but in-

and neither sedative nor stimulant but between the two -

tense thought brings on debility, 1st when to long continued
watching improper hours, thus people who sit up late are seldom
healthy, the midnight lamp ought for this reason to be avoid
ed, 2d It produces debility when the subject is disproportion
ed to the ability of the person, ——————————

The Passions are divided into Stimulant & sedative"
The former as hope &c act positively, the latter as dispair &c.
act negative, These passions are divided into chronic & a
cute or in other words passions properly so called & emotions
Sometimes the passions are mixed & then they produce differ
ent effects as ambition with fear ——————————

Love produces different effects according as the persons
are successfull or not, those who are disappointed in Love
always love stronger after it, if at the time with their being
rejected there is not something that will have a tendency to
affront, for this reason Gregory in a Legacy to his daughters
told them that when they were addressed by a man whom
they intended to reject, to give him a refusal in positive
terms, that he may have no possible hope of future success
Unsuccessfull Love has a tendency to produce Dyspepsia
Hypochondriasis, Hysteria Melancholy &c ——————

Joy is a powerfull stimulant & will sometimes pro—

" Rush says the system is above the weeping point —

-duce Syncope & even death, The door keeper to Congress in the time of the revolution was struck dead sudden by thro' Joy when he heard of the capture of Cornwallas, When Joy does not produce death a great depression of spirits often follow and even suicide, Joy is greater when the excitability has been accumulated by previous fear ——

Anger is a powerfull stimulant, produces a flow of blood with many other un common emotions of the system & will even produce death, A Shoemaker in this City, through excess of anger died, because he could not avenge himself of an injury done by a parcel of Boys — a miser whilst he was complaining of his tax gather fell dead ——

Grief acts like a slow poison upon the system, It is one of the worst of sedatives, It produces dyspepsia Loss of appetite & Grief when excessive will prevent a flow of tears, "There is a point of grief which may be called the weeping point above or below which tears will not flow, Tears flow when excessive grief comes down to the weeping point hence the hypochondriac passions are so much better after the flow of tears in consequence of this it appears to approach the Hysteria, Persons under deep grief sleep more soundly than at any other time ——

" and causes the Urine to flow involuntarily

Fear when excessive produces a quick pulse dryness, debility Aphonia, Asphyxia, Mania, suspension of labor pains & death fear causes the hair to rise upon the head, to become grey in one night. "A man's head became grey in one night in consequence of the excessive earthquake which destroyed Lisbon in 1775 It acts on the mind & sometimes annihilates the desire of life Speech gives energy in the time of fear, hence boys when under fear, banish it by talking of any other thing except the thing around them It produces debility & accumulates excitability, hence the reason why Cowards perform great exploits

Terror is fear in a compound form when combined with anger, Envy acts like a perpetual Blister or issue

Ambition is an Inflammatory fever of the mind & has great effects upon it, A Minister of state in Sweden died of a Cholic in consequence of his being taken from his place. —— Avarice Many have died) to use the common expression) in debt to their own backs & bellies, It abstracts from the love of ones country neighbours friends, relatition, Servants, wife, Children and lastly ones self. ——

The following Epitaph was written on the tombs stone of the Avaricious Arch bishop of Canterbury ——

Epitaph ——

" a man that was married had communication with his wife 5 times a day for 3 years and emitted semen every time, but at last he became weak and tired of Life, and said that he would rather be cut, that alive - - - - - - - -

" Dr Ulster in Lecturing said, that he was confident that the reason that men could not make the penis stand, was Owing, to the person drinking to hard or the excessive use of Women — —

Here lies his grace in cold clay clad
Who died for want of what he had

His only by a knowledge of the passions of the actions in a simple & compound state that a man can have any influence over the minds of other men

The Venereal Appetite when indulged legally & religiously seldom does any harm, It injures when indulged by persons either to young or too old. The old are not affected except they have young wives or husbands, When an old man marries a young girl he expiates his folly by his death It injures when accompanied by abscence books prints &c By medecines operating upon the organs of generation as Cantharides, When gratified by Onanism, By excess in married Men which is relieved by Sacchaturn or Salivation Cowdiet; By seminal polutions, In women this produces fever Uterinus, The diseases are Dyspepsia, Gonorrhea, Consumption &c "

Different situations as they influence health

I formerly mentioned the diseases of Society which are divided into the savage Barbarious & Civilized all of which have there different diseases, as Men advance in Civilization Fevers diminish & nervous diseases take place

out of 200 miners not one had a rosy cheek
they worked under ground . . . . . .

Different Governments, In Monarchial governments there is less sensibility than virritability, but in Republican the reverse ——— Different relegions The doctrines of the Christian relegion are more friendly to health than any other, Different employments, Farmers are generally healthy, Carpenters are very long lived because they work in the open air, Fevers are more common to these two, and Scurvy to sailors, Rheumatism is common to to Soldiers as well as Sailors, Coachmen are subject to diseases in consequence of waiting out in the cold for their masters, Weavers are particularly subject to disease as Dyspepsia, Hypercondriasis, hysteria costiveness &c" The posture of Shoemakers & taylors invites to disease, Bakers from their living in damp cellars & from their being exposed to the dust of flour are subject to pulmonary diseases, From accurate observation made in the City of London the average life of a baker was 3 years, Smiths from their exposure to heat & cold are subject to inflammatory diseases &c Studious men are subject to head ache, dyspepsia & hence this last has been called. Morbus studiorum, Judges are subject to calculus from their long retention of urine, Clergymen to Dyspepsia, Gravel, Consumption, Lawyers are less subject to the diseases peculiar to the other classes, in consequence of their

blending the exercises of the body and mind, I refer you to Ramazzani on diseases of different kinds of tradesmen ——

Different amusements, hunting is often a dangerous amusement, exposure to wet, cold hunger & fit brings on many diseases, different amusements are hurtful especially to the Ladies from their standing before a glass or under the hands of a barber in a cold room previous to their going out upon a visit, improper change of dress, the air of crouded assemblies, dancing, I knew person who died of a fit of apoplexy in leading down a country dance, Theatre produces numerous diseases ——

Peculiar customs as productive of disease, There are a great number of diseases to which particular fashions & habits of men have given rise to, The first of these is dram drinking in the morning to act as an Antiflogmatic, It creates a fondness for spirits throughout the whole day & lays the foundation for drunkenness 2d. The practice of drinking wine bitters before dinner is a dangerous practice, if the appetite be good it needs not an additional stimulus & if otherwise, the bitters creating one beyond the powers of digestion, will bring on indirect debility 3d. The customs of women receiving lying visits, the female system is then in a very irritable state & by no means able to bear the stimulous of conversation 4th. The tolling of bells for the dead, This —

has a very bad tendency upon a sick person, 5th Chewing tobacco, see my essay ——

Diseases arising from unhealthy Ancestors, these are congenial & hereditary, of the first are many diseases, as measles small pox Jaundice, Lues venera, Plague, Yellow fever, Sore eyes Cancer gout & a child very much like his parents in the eyes & forehead, will very probably inherit the parents diseases Dr Russell says that in the time of the plague in Aleppo many children were borne off with the plague which their parents had

2d Hereditary diseases depend upon temperament & shape of an ancestor, Consumption is more frequently derived from the father & mania from the mother, It is remarkably that the consumption seldom appears before 20 or 21 & madness not before the age at which it attacked the mother, generally in the decline of life between 60 or 70 When the parents have been afflicted with gout &c the intemperance will bring it on in the children — Gout, hysteria, hypocondriasis & leprosy are all hereditary diseases, besides congenial & hereditary diseases there are family diseases as Epilepsy, Palsy &c. there are many instances of diseases skipping one or two generations & then shewing itself You must not then confine yourself to the parents in searching for the source of diseases, but you will

often have to go back several generations, A regard to the operations of medecines in hereditary complaints is necessary, What was good in the same case in the ancestors, for there are family medecines as well as family diseases, This is of such consequence that I wish all those who have diseases communicable to children wd likewise leave with them the remedies they had found usefull.

DISEASES arising from the improper use of medecines, These have arisen chiefly from the indudicious confidence in false systems of medecines, the false systems of medecines from Hippocrates to Brown have slain their thousands in the hands of weak Physicians, that physician will have the most success in his practise who borrows a little from all the systems, Many hundreds have died in consequence of the publication of Dr Chain on regimen by living on diet so low as not to sustain life, from taking Opium upon a supposition that is was sedative according to Dr Cullen, From a confidence in the Asthenic diseases of Brown, But think not Gent that I do not hold out for a theory of medecine which have done much harm, But we ought not to reject entirely, the truth of the theory of medecine, because of the different spurious ones, than we ought the true religion, because there are many false & injurious ones in the world. The injudicious confidence of nature in its operations is also a cause of many

death. This injudicious confidence is just as absurd as to believe in witchcraft or animal electricity, One grand argument in favor of the operations of nature is that she is the only Physician in the brute creation, but this proves too much, Brutes seldom recover from a slight disease, such as we could cure in many by the application of a few simple remedies, But in this enlightened age, Nature seems to be the Pagado of many Physicians, If the regular bred Physicians have done harm by the means just mentioned how much more must have been done by the — — —

Quacks & Mountebanks I once saw a dialogue between a sword & a rum hogshead disputing which had done the most in destroying man, had a representative from the quacks stepd forwards he would have gained the palm with ease. —

Diseases arising from the imprudent or habitual use of Medecines with or without the advise of a Physicians — —

1st Purges, these when given too often dispose to costiveness & thereby call oftener for their exhibition, different kinds of purges do injury to different parts of the body, Aloes dispose to piles, Butternut pill dispose to vertigo Salts &c Sulphat Soda to a debility of the intestines, Purges are often given to prevent eruptions & but abstinence from animal food would be much the best. —

2nd Emetics The habitual use of them produces dyspepsia also other complaints of the stomach & by that means effect the general system they produce ruptures of all kinds. —

3rd Bitters induce indirect debility dyspepsia & dispose to dram drinking &c. Exercise is the best of all tonics with a well regulated diet —

4th. Nitre has produced dyspepsia & a disposition to Colic &c.

5th If used in the Spring without disease induces Plethora Apoplexy &c. abstinence in the Spring is much to be preferred —

6th Sudorifics habitually used injure the system. —

7th The imprudent use of the warm bath or cold, disposes to many diseases but when the warm bath is used in the predisposing or forming states of fevers it is an excellent or a valuable remedy —

8th Pediluvium when indiscriminately used as often does harm as good in predisposition to disease it has been of immense service but when morbid excitement prevails it produces delirium & increases every system of the disease, a pint of wine will do as little harm when the disease is formed as pediluvium —

9th Diets & Drinks suggested only by false theories of medicine produces many diseases —

10th Exercise in excess is hurtful especially in fevers —

11th Quack medicines of all kinds, have swelled the bills of

of mortality, Thus Godfreys cordial has destroyed many Children I saw it once destroy a child in this City, Turbinton's Balsam has produced inflammation in the bowels & even death, even the so much fetched portland powder has done considerable mischief, But sometimes medicines do harm in the end when in the beginning they do neither harm nor good & that too in the arms of judicious Physicians this arises from a peculiar Idiosyncrasy in certain Constitutions hence Gent, you may see the impropriety of blaming your brethren in medicine too soo

Sympathy & Antipathy as inducing disease, this Gent is a different subject that sympathy should exist in the minds is easily imagined, but that it should exist between bodies is not easily imagined, the diseases of sympathy in bodies seem accountable for upon the consideration that man is an imitative animal, this principal of imitation is a deep seated principal in the mind of most of the human race, It is to this that I refer yawning & gaping which are so infectious in large assemblies, to this likewise I refer the sore eyes which sometimes arise from viewing those that are sore, even convulsions have been communicated by sympathy also stuttering fits as they are called &c.

But how shall we account for that intuitive evidence which some people discover in finding out events to which they are

entire strangers as to any external cause, Dr. Johnson says that Lord Roscommon when a boy a School in France was suddenly when at play impressed with the Idea that his Father was dead who was then at the distance of 300 miles from them, true it was his Father died at the moment the Idea struck him ——

Antipathy is often Congenial & acquired, some men are borne with an antipathy to water as Peter the great, King James was borne with an antipathy to a sword, others to cats dogs rats &c. I once heard of a man who could even tell when there was a Cat in the room without seeing or hearing it, this must be owing to certain effluvia of the animal he hated, all these people are rendered liable to disease from their antipathy, which other people are exempted from, For instance a person having an antipathy to a cat will be excessively agitated & perhaps made sick by being confined in the same place with one, but this would have no effect on an ordinary person ——

Diseases arising from the association of Ideas & motion of the former it is well worth attending to, there is scarcely a disease in which this association is not present, of the latter they are not numerous, 1st. If a man accustoms himself to make water just before going to bed, he will be sensibly affected by omitting it once, 2d. A Lady who took snuff profusely was at last ta-

ion with the Palsy & became incapable of raising her hands to her face which she could very easily do when Sal Cornu Cervi was applied to her nose, these two facts are sufficient to prove the powers of the association of motion, It is by this association of motion, I account for the periodical returns of paroxisms in intermittents &c. that is so proved by these paroxisms being prevented by exciting a new action or mode of association in the system, thus riding on horseback cures intermittents by breaking the chain of association Salivations & travelling has had the same effect in Epilepsy. —

Diseases from Accidents, I once saw a case of hydrocephalus internus brought on by the stroke of a hammer on the head 18 months previous to it, and another of a pain over the eye in a man who had been frequently raised by the head when a boy, Mr Campbell was taken maniacal at 23 from the kick of a horse which he received at 15. You see that we have to go back days months & seven years for the remote causes of disease, See Bells Surgery for diseases of this kind. —

Diseases of time or old age, See my enquiries, I shall however mention such facts as have occured to me since their publication, 1st. the state of the stomach greatly influences longevity, I never knew a man to live to be old who was subject to stomach complaints, we should never eat what disagrees with our

stomach, It is the conscience of the body, The signs of a healthy stomach are 1st an appetite & an ignorance that we have one 2d That we have no more of the food after we follow it, i.e. no signs of flatulency heart burn &c. ——

2d Migration influences the approach of death, Europeans by coming here after they are 40 generally add several years to their lives, old persons frequently prolong their lives by migrating from one country to another situated in a more souther latitude ——

3d However long some people live few die of old age ——

4th It is computed that only 6 out of a 100 reach 60 years ——

5th More people women live to be old than men, but more men to be very old than women. ——

Predisposing causes of disease, these are either natural or artificial the natural occur in different ages and conditions of the system as —— 1st Infancy, these arise from the dispro-portion of the head & consequently a greater determination of blood to that part, Hence eruptions behind the ears Tinea capitis, apoplexy Hydrocephalus &c. Infants have less also more irritability and less sensibility than adults, hence they are more more disposed to convulsive diseases of the stomach & bowels &c. dentition not only produces painfull & swel-

ded gums, convulsions fretfullness &c. but I have seen it produce swellings of the inguinal glands & gonorrhea, Worms tenderness of the skin passions &c. all become the source of disease in Infants It is computed that 1/2 the Infants die under 10 ——

2d Childhood & Puerility, The diseases of Infancy are near by applicable here irritability still predominates over sensibility One half of the Children die before the age of puberty, more die in warm than in cold countries, more among the poor than among people in easy circumstances —

3d Puberty. In this sensibility begins to get the upper hand of irritability, Here febrile diseases of an inflammatory nature begin to take place, as Phthisis Pulmonalis Catarrh Dyspepsia, Hypochondriasis, Hemorrages &c. most of these diseases may be prevented by low diet & purging &c. ——

4th Adolescency & Manhood, takes place at 18 and continues till 36, The diseases of this age arise from a determination of the blood to the organs of generation, They are diseases of the stomach, Dyspepsia, Hysteria, Hypochondriasis, pain in the limbs & joints, swelling in the neck & groin giddiness in the head & those which arise from the exercise of the venereal appetite from 36 to the 46 year of our life, the venous plethora prevails over the arterial, From 40 to 57 there is a better health, more —

happiness & fewer deaths than at any other period, The excitability & excitement being equally proportioned to each other, but old age soon comes on the menses in women now cease to flow this disposes to many diseases, as soon as man begins to use spectacles, he may be said to have put on part of his shroud & when he rises in the night to discharge his urine he may then be said to have advanced the first step to his grave, From 57 to 63 the system is predisposed to Colic vertigo & apoplexy, from 63 the system gradually decays, It is then that a 2d Childhood is produced & here again excitability predominates, Thus a man who at 40 would drink his bottle a day, wou'd at Sixty or Seventy be intoxicated with 3 or 4 glasses, It is at this period that the grasshopper becomes a burthen, They are more disturbed at trivial accidents & are more sensible of the changes of heat & cold, after this the body advances to 80 or 90, The fluids of old people become acrid by age, as the tears, gastric juice, urine & Mucus of the Nose &c hence trifling sores often terminate in cancers in this time of life & bruises end in mortification, Here muscular weakness also attends, Hence the shaking of the knees head & hands. ——

The diseases of old people are Chronic & acute, The former attacks first the blood vessels, 2d Nervous, 3d the muscular system, 4th The brain, 5 the alimentary canal ——

Some old people take a pride in shewing their strength by standing
exposing themselves to cold, by this they not only suffer sickness
but death, Few people die of old age, they are frequently said to
die of old age, but when this is the case they leave the world without
pain & death is nothing more than a sound sleep, Dr. Priestly
told me that his Father died of extreeme old age alone, He was
sitting in his arm chair surrounded by his family & the last words
he uttered were "that he felt no pain whatever and with these
words he breathed his last ——————

Conditions of the system in single & married life as predis
posing to disease ——————

Married people are generally of longer life than single
Single people are subject to hysteria &c. women are disposed to
disease from disappointments in love, Ceteris paribus, a greater
proportion of single men & women die in a given time than
married ——————

Barrenness is often a scource of disease, I once knew a barren
Lady who upon seeing a pregnant Beggar said "I won'd be that
women with all her rags if at the same I could be with child
Barrenness, Batchelors live a hypponchondriac life, It
has been said that a batchelors life is a good breakfast, tolerable
dinner but a very bad supper, Pregnant women are subject

to acute diseases, the consumption is suspended during pregnancy because the Inflammation of the Uterus is so great as to take the determination from the Lungs, but when the Uterus is relieved of its distention many other diseases may arise from the abstraction of its former stimuli, Pregnancy predisposes to costiveness, Vertigo, Mania &c. Suckling Children to consumption & a suppression of milk to cancerous tumors &c. There would be few cancerous Uteri if it was more used about this time of life, Some diseases are apt to produce abortion as Influenza even when moderate, while the small pox & others of a more powerfull nature do not, The Menses cease to flow between 45 & 50 then the system becomes plethoric & disease may be prevented by occasional V. & purging Low diet & exercise ——

Deformity in size or in the figuration of the whole or any particular part of the body predispose to disease, People uncommonly large or small are apt to be very short Lived, Very tall men according to Dr. Darwin seldom live over 25 or 27 years, Dwarfs are generally short lived, The following is an exception to this, two dwarfs that were brought from Germany in the time of George 1st lived 80 years, those who grow very fat before 40 are generally very short lived, Large heads & short necks dispose to apoplexy, Narrow Chests to diseases of the Lungs, Montaigne says

that deformity of particular parts dispose to increase the venereal appetite, women suffer less from deformity than men, Congenial weakness weakness of a part or of all the body dispose to disease, One disease badly cured dispose to another thus Pneumonia badly cured disposes to Consumption, Intermittents to Jaundice Dropsy &c. the present King of England is only a 7 months child but in consequence of his temperance has reigned many years, of the all parts of the body the Stomach Liver & spleen are the most susceptible of disease, I must not conclude this subject without taking notice of the causes & Phenomena of death ——

Death follows the absence of stimuli which support life, these stimuli loosing their effects by repetition, the excitement being smothered as it were by the excessive force of impressions &c. Morbid excitement just before death fixes in succession in different parts of the body, Falling upon the brain it elevates the genius above its ordinary exercise gives occasionly more talents, as a talent for Music poetry &c. Recusitates dormant impressions, so that a language long forgotten is spoken again, Transferred to the trachea & glottis, morbid excitement just before death produces a very strong voice, the rattles &c. Transferred to the Stomach. a wonderfull appetite is excited just before death, To the muscles it produces rigidity in them & convulsions — To the penis producing

priapism, To the arteries producing activity of the pulse at the wrist, Morbid excitm just before death, wether fixed diffused or flying is frequently attended with great pain, which pain is constant or attended with Intermissions, Death from old age is never painfull, Sometimes at death morbid excitement becomes stationary, at the ~~period~~ point of pleasure & the person feels pleasure while dying, Death is often attended with great ~~pain~~ fears of futurity, but sometimes the wicked are unconcerned about futurity, The coldness attending death generally begins in the toes & fingers, but sometimes in the wrists, There has been many disputes about the Ultimum Moriens, I am of opinion that this depends very much on the nature of the disease the person dies of, The stomach & bowels generally retain their vitability for some time after death, tho I am disposed to believe it continues for some time after the heart & respiration has ceased, Heat and color often fluctuates in the body for 2 or 3 days after death, A Yellowness of the skin often takes place at the moment of death, The Pupils of the Eyes become less. ——

This Gentlemen finishes our pathology, & I again repeat that there is but one disease, morbid excitement; but one predisposing cause, debility, & but one exciting cause an Irritant ——

Therapeutics.

Gentlemen

After having considered the remote, exciting & predisposing cause of fever disease we proceed to Therapeutics & view the system in a morbid state with the debility predisposing & following diseases, Chemistry Mat. Medica Anatomy Physiology &c are all valuable only because they throw light upon the practice of Physic & cure diseases, all these branches are necessary to be understood by a Physician & also Surgery & midwifery, Therapeutics or the art of curing diseases formed upon a knowledge of their causes, I have uniformly considered as a science, Medecine has improved in proportion as it has become a Science & received aid from other auxillary sciences, I shall not give you a particular history of medecines and their doses that I leave to Dr. Barton, I shall only give you a general account of the tools or medecines you are to use & the manner of using them The first article in our syllabus on Therapeutics is respecting the powers of nature in curing diseases, what is at present called the supposed powers of nature was the Anima medica of stahl, the supposed powers of nature arise entirely from physical necessity

1st There are however cases in which nature is too weak & feeble to do service as in malignant fevers ——

2d There are however cases in which nature cures diseases, such as in fevers causing a dislike for food, in hemorrages by causing faintness & consequently a collapse of the vessels & in wounds by supplying new bones & flesh ——

3d In others she is not proportioned to the disease as in Cholera Morbus

4th Entirely idle sometimes, as in Chronic gout, Epilepsy, Mania Cancer & Syphilis ——

5th Sometimes refuses her aid as in Aneurism & schirrus ——

6th Sometimes does mischief as in dropsy & Consumption ——

7th sometimes excites less pain than is proportioned to the disease as in Tetanus & sometimes more as in Whitlow & tooth ache —

6th Nature is weak in the diseases of domestic animals for in these diseases & death are very nearly connected, especially in Epidemics —— I am not the first who supposed the operations of Nature in curing diseases, Sydenham & mead were long ago opposed to the operations of Nature, the effects of Nature in the cure of Diarrhea & Pleurisy bear no resemblance to Opium & the lancet which are our sovereign remedies Nature in health is like a man in his senses but in disease like a madman — She may be compared in disease to a —

drunken man in a dark room who after finding the door stumbles against it, breaks it down & ends its existence at the same time, In short when you are called upon to prescribe in acute diseases, you should serve nature as a cat or dog in a sick room ie, turn her out of doors, In the cure of diseases, however, the operations of nature may be attended to but not trusted, In Epidemics if the bowels should be affected & show a tendency to carry of the disease by discharge this operation should be assisted by purges, If hemorrhage from the Nose attend the disease, bloodletting will be proper, If boils or eruptions on the skin appear substitute an artificial disease on the surface, If sweats accompany this sudorifics should be administered Lastly if sore throat or a disposition to cough attend, Mercury should be administered to expel the morbid matter, You see Gent that Physicians should be the masters & not the servants of nature as Hippocrates said.

One outlet to a disease should not be solely attended to, altho' it may be sufficient in a few very mild diseases yet every avenue & outlet thro' which it might pass should be opened

There are some diseases which should not be cured by art as eruptions on the heads on Children These should not be cured unless some other mode be instituted to carry of the matter

The bloody piles in old people should not be cured unless we

substitute some vicarious discharge from the body ——

Diarrhœa often should not be cured ——

Intermittants succeeding madness or Palsy should not be cured

Dr. Bond advised his maniacal patients to visit a marshy country & thereby get the intermittent as a palliative of mania but by in this case would have been much better ——

Gout & Rheumatism succeeding mania & melancholic should be cherished Dr. M. had a daughter that was twice taken with mania upon the retrocession of a head ache ——

Old ulcers or sores should not be cured up because apoplexy or Palsy often succeed a sore thus cured unless some vicarious discharge be substituted, Death has often been brought on by curing sore legs in old people, Ascites should not be relieved by tapping after remaining a long time, for it is rarely cured by it, I have seen death succeed tapping after a few days, besides the Lymphatics are sometimes roused into action & cures, Gonorrhea should not be cured when it has suspended other diseases of a more violent action. Habitual sweats from the feet should not be stopt. There are some cases in which pain should not be relieved but these are very few ——

In Epidemics we ought to pay particular attention to the climate & all local circumstances, to the seasons of the year, heat & cold, dry & moisture, There are no successive Epidemics perfectly alike

in different years, consequently the practice should be suited to these different circumstances & regulated by the national temperaments habits dress, customs & attention aught always to be paid to the country from whence the person came Intermittants when they attack a native of Ireland frequently require V.S & seldom yeilds to the bark after he arrives in America, untill the use of the Lancet has been used, while in the natives of the middle states intermittents generally yeild to the bark alone, The particular desires & longings of the patient should also be always attended to, In the time of the american revolution the soldiers of the eastern States were affected with Nostalgia, while the Virginians longed for Corn bread & Salt pork, appetites however singular should not be neglected, nor are the forms of Government or Religion, Individual temperaments & habitual diseases or habitual remedies are not to be left out of consideration

In chronic & hereditary diseases you should look back as far as the 2d & 3d generation ——————

Whole families are sometimes carried off by diseases contracted by peculiar habits, Witness Dr. Craigs family of Alexandria all of whose children have died with consumption Whilst his Wife & himself remain in good health,

The age of Men the state of their hemorrhoidal

pipes & the Catamenia in women are not to be overlooked also worms in children we should have in view in our perscriptions. —

There are often recent causes of disease which Physicians should always have in view, as hard drinking, intemperance in eating gull tone, debt envy mortifications &c which should be sought for from their friends, acquaintacies, & not from the patient himself. Physicians must look back frequently months years for the causes of disease, The removal of the remote cause as Celsus says, for there are his words, "sublata causa tollitur effectus" will not cure the disease, for the Hydrocephalus Internus of Children to which worms predispose, is not cured by the removal of the worms, In the treatment of diseases, hope as far as consistent with truth & reason, should be inspired into our patients, for it is the best vehicle of medecine & the greatest circumspection is necessary that not even a doubt be expressed for it defeats the intention of medecine, The principals of faith should also be attended to, Hence quacks so often succeed in the cure of diseases, The predisposing cause of all diseases is debility which appears to be a mechanical power in medecine. —

There are perhaps no diseases which do not appear to have alternate exacerbations & remissions which sometimes

require different & even opposite remedies, In the first case sedatives are necessary, In remission debility is frequently present & requires the administration of cordials In chronic diseases the patient should regularly take his medecine, It is frequently of very great importance to advise patients to continue the use of their medecines even when they feel the least want of them Debility which is the predisposing cause of disease, is not confined to days, weeks nor to its forming state, it frequently succeeds disease, in which case the patient should continue the medecines which cured the disease for even months & years Disease may be compared to a garrison the besiegers of which should never be Idle, unless there be a certainty of bringing on a capitulation by starving the people therein

The choice of Medecines, Formerly they were thought to be valuable according to their prices, I suppose all disease may be cured by a few medecines, which by being better known will be more certain in their effects, an advantage frequently arises from concealing their names

Respecting the operation of Medecines, two opinions have prevailed one is that they act more certainly in a simple form while others contend for the advantage arising from combination, these opinions appear to be reasonable, The Bark, Opium is best when exibited in a simple state, While Sugar enables the stomach to retain

medicines which it would otherwise reject, In this case a weak pleasurable sensation overcomes a powerfull disagreeable one, Bark & Valerian combined will cure certain headaches but when seperate avail nothing, Opium & Alkali will cure certain cases of tetanus yet when seperate avail nought, Dr. Pourdice contends for the advantage arising from compound medecines & says that ~~some medecines are strangers~~ Allum is a greater astringent when combined with rose water than when alone, Dr. Hall also contends for the combinations of medecines & says that some medecines are strangers & enemies to the system & should not be introduced into it without their guides or spys, Squills & Gum Ammoniac when combined form a better pectoral than either of them seperately

Tartarized Antimony & Specachuanna form a better emetic than when seperated, Capsicum & pepper give no heat in the Stomach, as when seperate, Neatness & Cleanliness should be greatly attended to in our preparations of our medecines, Writing the name of the Patient on the paper, this should always be done —

Drawing the mind from itself, or in other words, drawing off the attention of the patient from his disease is very beneficial Dr. Cadwallader was very successfull by this practice, He once by reason of his great humor prevented a man from

committing suicide, It is of great consequence to recollect the different effects of medecines on adults & children, for Sacch saturn will cure Epilepsy in Children but not in adults; The tone of the conversation should be suited to the state of the mind, Hence mirth is sometimes benificial & sometimes predjudicial mentioning high priced medecines to persons who are unable to purchase them should be avoided, Physicians should never advise Patients to make wills as well pass sentence of death upon them, but they should always inform the friends of the patient concerning his danger, The best medecine that can be used is sometimes no medecine at all, If the patient is constantly working to take medecine, feed him up with bread pills or some other convenient article on wh he should be encouraged to place confidence, Concerning the operations of medecines there is more fallacy in the opinions in the opinions of Physicians than in any other point, Dr Fordyce says the best effects of antimony in a fever is to produce a relaxation of the Skin, whilst Dr Cullen thinks that Nausea is of the greatest advantage, Since we reject Empyricism we must always prescribe for the symptoms of the disease & as consultations may be usefull in some diseases & compound medecines they should always be resorted to ——

1st " as Iron sharpens iron so will the opinion of one Physician

2d " as first another ——

2d. Novelty of two or more Physicians may inspire hope & even confidence in the Patient

3d. Responsibility is divided between the consulting Physicians

Cases in which a consultation is necessary, 1st. In doubtful cases, 2d. in dangerous tho' not doubtfull, 3 In uncommon cases 4th. in desperate, 5 when new medicines are supposed to be proper 6th. In cases where there will be probably an appeal to justice for the life of a patient shou'd not depend upon the testomony of one man, or at least a physician wou'd not be willing to bear testimony alone, when the life of a human being depended upon his opinion, In consultation's choose physicians whose principals are similar to your own, Two modes of practice tho' each may be good when seperate, yet when combined always do harm Remedies for preternatural excitement gentle purges & Physic and in some instances bf. debility when it proceeds disease the remedies & gentle stimulants & rest, the shou'd vary accordin to the seat of it, debility when it falls upon the blood vessels requires different stimulus than what it does when it falls upon the lymphatic system —

We come next to the application of our Principals, 1st. effect of impression's upon health by ~~impression's~~ excitement is to elevate it up to 60 on our scale and pro—

duce preternatural excitability ——

2d debility from action is produced by a longer application of impressions, The system is now at 40, If you abstract or add impressions the effect is the same viz debility ——

3d Depressions, the system is now at 30 these states of the system are attended with accumulated excitability, if the impressions act suddenly ——

4th Diseases or morbid excitement is produced by a still longer application of impressions, but of these impressions act gradually, both excitement & excitability are worn down & no disease is produced ——

5th Oppression or suffocated excitement, Prostration, Disorder, Debility, The system is now at 20 ——

6 Prostration, The excitability is now smothered & the system cannot react, new & different stimuli must be nowused to rouse the latent excitability, which is enveloped as it were & will not emit the motions of life ——

7 Disorder, —— 8th Death ——

When debility is suddenly induced it is attended with accumulated excitability, & shou'd be treated with low diet rest & gentle medecine, but when debility is induced gradually we must gentle stimulate. ——

Elevation shews itself by alacrity & wakefullness & an increase of appetite, Depression is followed by a tendency to disease sometimes, in this case depletion should be used, but when there appears to be no tendency to disease stimulants should be used, we must equalize excitement & divert it from vital parts by depletion & stimulants. ——

Medecines have been divided into sedatives & stimulants The 1st. class viz sedatives act by abstracting & reducing morbid excitement, The 2d. class viz stimulants act by equalizing excitement by creating a new action, by diverting it from parts more essential to Life to those which are not so much so by rendering it natural ——

Sedatives are divided into direct & indirect, those which act directly by lessening the stimulus & abstracting morbid excitement are ——

1st. Bloodletting

2d. Cold applications, by air, water, or ice when the system is about 96 and skin dry, usefull in muscular diseases

3d. Fear, This reduces morbid excitement by abstracting the stimulus of courage ——

4th. Abstinece, This of is different grades, 1st. refraining from fresh animal food, 2d. from salt meat, this is not so now

shing a fresh meat since so great a quantity of it cannot be eaten, 3d from fish, 4th from milk & saccharine matter, 5th from liquid aliments of all kinds, abstinence acts in 3 ways 1st By lessening the fullness of the blood vessels & thus diminishing all the secretions, 2d by abstracting the stimulus of & 3d By when great hunger is induced, a new action & thereby diminishing morbid excitement, the operation of abstinence is too slow in acute & is only to be trusted in chronic cases & in those cases of debility, when it increases excitability & thereby leaves greater room for the action of tonics, The three following facts with respect to abstinence should not be forgotten, 1st the Indians abstain from food previous to a battle, hence so few of the wounds prove fatal, 2d animals fasting sometime before their death are after death less predisposed to putrifaction, 3d we always bear fatigue after a vegitable diet or abstinence better than when we eat plentifully of animal food —

5th rest abstracts the stimulus of muscular motion

6th Darkness abstracts the stimulus of Light —

7th Silence the stimulus of sound —

The abstraction of excitment should always be performed in a gradual manner hence the saying "Natura nihil fit per saltum"

× & are deprived of their virtues in their passage thro' it

Here we will premise a few propositions. ——

1st. I beleive there is an action of Specific stimuli. ——

2d. That stimuli act on the whole system thro' a particular medium, here the Stomack is the great medium, thro' which medicines act on the whole system & it posesses the greatest sympathy of any part of the body. It may be compared to the regulator of a watch. ——

3d. There are medecines which act on sensibility as Camphor, mustard &c. Some which act on virritability as Digitalis & some which act on both as opium & bark ——

4th. There are some Medecines which enter the blood ×

5th. There are some which are deprived of their Medicinal qualities by passing thro' the body ——

6th. The different parts of the system are capable of receiving more than one stimulus & even such as are of opposite force at the same time ——

Those Cedatives which act indirectly are such as open the bowels, these I shall divide into three classes viz —

1st. Lenient as Crystals of tartar, Natron clysters, such as act only by their quantity, Castor Oil Manna with the different Salts &c. 2d. the active as Rhei Jalep Calomel &c. & 3d. The Drastic purges as Gamboge scammony Aloes &c. ——

Cathartics are indicated —

1st By a distention of the bowels with fecis for this No. 1 shd be used

2d By complaints of the head for this No. 1, namely the Cincent

3d In congestion of the viscera for this No. 1 —

4th In all cases in which the bowels are unable to perform their functions here No. 3 or drastic are necessary

5th In all ~~cases~~ diseases of the contiguous viscera for this, 1. 2

6 In all diseases of the skin for this No. 1. 2 —

7th In dryness of the skin from the excitement of the capillary vessels for this No. 1 or 2 —

8th In all Plethora for this No. 2 —

9th In all dropsical effusions they are proper by lessening the excitement & producing absorption for this, 2, 3 —

10th In obstructions of the hemoroidal vessels for this 1.

11th In obstinate obstructions of the ~~Hemoroidal~~ bowels for this No 1, 2, 3 —

Here it will be proper to remark that purgatives in a smaller quantity will not operate after a larger quantity has been used & that a greater quantity should be given to have the same effect, if previously the system has been habituated to the same medecines, as an alternative they should be given to produce an artificial

Diarrhœa, When it is necessary to continue purges a great length of time they should be varied, No solid food should be taken during the operation of purges & they are not so certain in their operation if liquids be copiously given, The mild purgatives induce sweat more speedily than the drastic, Clysters act by their quantity & quality, Purgatives are forbidden in the following cases —

1st In diseases of weak morbid excitement, 2d In the typhus state of fevers, 3d In hemorrages of the bowels 4th in the first stage of Colica Pictonum. —

Emetics These are divided into four classes viz the prompt mild powerfull & nauseating

1st Those which act ~~powerfully~~ promptly as tickling the throat with a feather putting the finger down the throat warm water Sulphat Zinci, or white vitriol &c —

2d Those which act feebly but certainly as Ipecac & Squills

3d Those acting forcibly on the Stomach as Antim Tart, Turbith mineral &c —

4th Those which act by nauseating the stomach as digitalis & tobacco which last may excite vomiting by being moistened with brandy & applied externally —

Emetics are Indicated —

1st In cases of swallowing large doses of Opium & arsenic, In

there cases the first class should be used, I have prevented death in two instances by these means.

2d In here the 2d class should be used.

3d In discharging bile, mucus or indigestible matters from the stomach here the 2d should be used

4th In languid state of the stomach, here the 2 class should be used

5th In morbid diseases of the head in consequence of its sympathizing with the stomach, Here the 2 or 3 class should be used

6th In tumors in the remote parts of the ~~remote~~ body as bubocs &c here the 2 or 3 class should be used

7th In dropsical swellings here the 2 or 3d class are proper

8th In an oppression of the lungs as in Catarrh, Pul. Consumption Cynanche Trachealis &c but when the lungs are affected with disease, they should not be used, in the 1st the 2d class is proper

9th In dryness of the skin here the 2d or 3d class is proper

10th In the forming state of malignant & Cutaneous fevers, 2 or 3 class are proper here, they act in two ways, 1st by equalizing excitement & by discharging the seeds of the disease

11th They are more powerfull & effectual in diseases of Children than in adults, children require more powerful Emetics than adults as their stomachs are lined with mucus, they are us,

full in Diarrhœa & in some cases of dysentery

In the exhibition of Emetics you must observe — 1st. To give them in divided doses, in order that they may not act too powerfully upon the patient, 2d. That as little water be given as possible when we want a ~~powerfull~~ prompt effect, 3d. That they operate more powerfully & certainly in the morning, the system being at that time predisposed to sickness, 4th. never suffer them to operate when the patient is recumbent, because by this means we prevent opism — 5 their operation is checked by ℞ Opii or a spoonfull of Salt thrown into a pint of water

Emetics are forbidden, 1st. In violent inflammations & congestions of the head & bowels, 2d. in two feeble action of system, 3d. In advanced pregnancy, 4th. In ruptures of all kinds, 5th. In low chronic fevers & general debility succeeding acute diseases

Diaphoretics Increase the discharge of the vitated humors thro' the pores of the skin & act either directly or indirectly

1st. Those which act directly on the Skin are pediluvia, baths of warm water, vapour bath, clay of the heat of the body & azote applied to the body. By covering the head with a blanket, these

may be called external sweats, ——

2d those which act indirectly & produce their effects by increasing the action of the heart & arteries are exercise to promote sweat cold water, this acts in a twofold way, 1st By reducing the immediate action of the Capillaries to the sweating point, 2d By the reaction of the skin when it is below this point. ——

Diaphoretics act on the system Capillary vessels indirectly thro' the medium of the stomach ——

1st By nauseating as Antim Tart &c 2d without nauseating as nitre eupatorium cold water &c there fall stomach sweats &c when the Capillary vessels are above the sweating point, these act upon the skin by means of cutaneous sympathy Diaphoretics act when the capillary are above the sweating point, by diminishing the excitement directly, 2d when they are below it, by increasing it directly or indirectly, 3d by their action being determined to the surface of the body, as Dover powder, vinegar, ardent sp, eupatorium &c 4th By the stimulus of distention, produced by warm liquids of every kind, Each of these methods are necessary & are often indicated

1st to discharge diseases from the blood, The miasmata exciting fever often attempt to escape thro' the pores of the skin I have heard of a young in whom the syphilis went off by

by the Capillaries, the poison of animals also escapes sometimes from the blood thro' the skin by means of diaphoretics. —

2d They are indicated when the symtoms are so mild as not not to require blood letting —

3d In centrifugal diseases, as Rheumatism, Gout &c when they affect the limbs, here I take notice that diseases are called centrifugal when they affect the extremeties & centripetal when they affect the body as Colic Dysentery &c —

4th In dropsical swellings when the symtoms are below the sweating point — 5th In fevers in which there is a disposition to sweat, tho' excessive sweating is sometimes hurtfull —

Rules should be observed in the exhibition of Diaphoretics

1st Perspiration is most easily induced in bed, to excite flannel should be worn next the skin, more perspiration will be induced in 9 hours in bed than 15 out of bed —

2d subdivided meals because the stomach being full & empty is unfriendly to perspiration —

3d great attention is to be paid to the heat of the body because sweat cannot be induced with safety when the heat of the body is above 108 of Farhenheits thermometer —

4th the temperature of the drinks should be warm when the heat of the system is below & cold when above 108 of Fahrenheit

5th Diaphoretics are to be regulated by the state of the disease
6th They should be suspended occasionally & used moderately
least exhaustation should take place ——
7th Care should be taken to have the linen & bed cloths of the patient often changed, because sweating is sometimes checkd by a stiff shirt —— 8th It is common to give diluting drinks in cases of redundant fluids & from redundant excretions, this practice is improper, But in cases of poison this should be done —— 9th Guard against cold & avoid purging & blistering, when you prescribe diaphoretics, unless the urgency of the case requires it ——

Diaphoretics are forbidden, 1st in highly inflammatory cases, 2d in weak morbid excitement, 3d when they weaken without relieving ——

Diuretics are medecines which increase the urine and are 1st cold air applied to the body when a little heated going into a cellar climbing up stairs, hearing a stream of fluid running from a barrel, cold water applied to the body, abstinence, fear, onions applied to the pubes, these I shall call external diuretics, ——

2d diluting drinks, such as melon, seed tea, white carrot seed tea, parsley tea, Dr Caldwell cured a patient of dropsy

with the parsley tea after tapping had failed, This class I shall call diluents ——

3d Those which act on the kidneys by sympathy with the stomach as Salt of Tartar. Nutral salts vegitable acids, alkali & they are indicated where the kidneys refuse to perform their office or where they are suffocated with Morbid Excitemt. Diuretics are forbidden in all cases where there is an inflammation of the kidneys ——

Sialagogues are Evacuents & Revulsives

Evacuents act first, By discharging fluids from parts contiguous to the salinary glands, such as tobacco Angelica &c. ——

2d By discharging fluids from the whole body in the form of saliva, such as Mercury arsnic sacch saturn &c. Mercury acts both as an Evacuent & revulsive, It is one of the most powerfull articles of the Me Me, yet its operation is disagreable & loathsome, It has been said that mercury is not only a loathsome, but also an unnatural remedie, but this is not the case for mercury is the first remedie of nature, if we admit that sore mouths & Apthæ are the first diseases of Children, — Hence when Children sleep much the gossip say that they are sleeping for a sore mouth, & if examined at this time they will be found to have a fever. ——

A determination to the mouth & throat is frequently the disease of children, or rather the attempt of nature to cure the disease as Scarlatina Anginosa, Cynanche Trachealis ——

In adults spontaneous salivation sometimes accompanies fever & the small pox sometimes, & is generally a symtom of a favorable termination, Death frequently succeeds this usefull & salutary remedy, if it be suddenly suppressed, If a cough & salivation attend patients with the yellow fever they generally recover Sydenham mentions a malignant fever In 1770, being cured by a spontaneous salivation, A spontaneous salivation has cured suddenly Dysentery & Gout, A spitting has accured in Mania & was called by the old writers Sputatoria, It is favorable in Autumnal Fevers, It is strange that is has not been long ago used in these cases, & that we do not always excite it when usefull, that we so often excite it when not usefull & that we do not destroy life by it as Nature does in Apthe malignant sore throat &c. ——

The auxillaries to excite salivation, are 1st. Vf which is of much consequence, 2d. Low diet, 3d. Emetics 4th. opium, This assist by inducing costiveness, 5 cold bath & ice applied to the head, Dr. Armstrong of St Lucia used the cold bath to assist the operation of Mercury. —

I have used that as well as other cold applications, Dr. Bloomfield used the cold shower bath & the partial cold bath as auxilliries to Mercury in producing salivation, Dr. Chilsolm tells us that Mercury acts soonest in warm weather, 6th. Mercury is greatly assisted in producing a salivation when combined with Jalap, 7th. With antimonial powders, 8th. with friction of mercurial ointment, 9th. Nitrated or muriated Mercury to be ~~triturated~~ tried with friction, calomel & corrosive sublimate, when we wish to give Mercury secretly, we may put Calomel upon bread & butter & let the Patient eat it, It is not necessary in order to produce a revulsion that a profuse salivation is necessary or even a Ptyalism & in some cases not even a soreness of the Gums

For restraining a salivation 1st. Opium, Purges, Blisters, Oils & borax held in the mouth Lime water & milk &c.

In Philadelphia Mercury salivates 1 out of 4 In the W Indies 1 out of 12 in the yellow fever, This must be owing to less morbid action existing in the disease of the West Indies than in Philadelphia

Salivation is indicated, 1st. In malignant fevers & such other fevers as are not remedied by other means 2d. In morbid actions of the head, Lungs Liver & spleen

Kidneys &c. 3d In Diarrhoea & dysentery 4th In Syphilis 5th Visceral obstructions, In obstructions of the viscera it is often not proper to give Calomel in such doses as to produce salivation directly, I have generally first made the mouth sore thus making it act as an Alternative.

6th In old ulcers both external & internal which have resisted the powers of other medicines 7th In convulsive diseases as Tetanus &c. Salivation is forbidden.

1st In highly excited states of fever, 2d In low exhausted states of fever, 3d In children under 6 years old, 4th In person above 60, 5th In those having many decayed teeth 6th In diseases tending rapidly to a crisis, Mercury never will produce gangrene, when the system is sufficiently reduced or after a Salivation has taken place. It is to be regreted that mercury is such a loathsome medecine, but man first sinned with his mouth, & to his mouth medecines must be administered to remove that disease or sin.

Errhines, These act by depleating from the Nose & are of two kinds, 1st Those which depleat from the Nose without sneezing, such as sal Ammoniac, Serbithmin, 2d Those which depleat from the Nose & produce sneezing as Tobacco

Expectorants are 1st Demulcents as flax seed Tea horse radish &c.

2d Emetics or nauseating medecines as Squills &c.

3d Volatile alkali, salts, smoke of tar, beeswax resin &c.

Expectorants are indicated in Pneumony Catarrh, asthma Phthisis pulmonalis & here the 2d & 3d class should be used about weak morbid action of the lungs here the 3d class is required

Emmenagogues should be administered according to the action of the system In diseases of great morbid action V should be used & there refrained from but in diseases of weak morbid action chalybeates & exercise should be used In this last case I have generally used steel which I believe fails only when given improperly Aloes & Madder are scarcely worth our notice as emagogues

Blisters, They act slowly as Cantharides & the Bark of certain trees, 2d as boiling water suddenly; They are indicated 1st In general diseases here the 1st are to be used 2d In local congestitions of the head bowels &c here the first class, 3d In sudden congestions, here the 2d class is to be prefered

The following rules are to be observed in the use of Blisters —

1st They should remain on untill they produce a serous discharge —

2d When applied to the head they should remain 24 hours —

3d As all blisters never discharge much after the second dressing new ones should be applied if necessary —

Blisters are forbidden in great morbid excitm, 2 In weak morbid excitm, 3d In habits highly irritable & person liable to suffer from strangurary 4th In Pregnancy —

There appears to be a blistering point in morbid excitment, above or below which it is improper to blister, & this point must be discovered by the pulse —

Issues are medecines to lessen the quantity of fluids gradually as setons, caustics, perpetual blisters &c Issues are indicated, 1st when the gradual abstraction of morbid excitement is required 2d In local congestions, 3d in cutaneous eruptions of the face or parts necessary to motion, In suffocated excitement medecines should be applied gradually, blood taken in but small quantities at a time, Cold water applied externally is always improper in the absence of heat, In suffocated excitement, there is very little; Issues act directly or indirectly by equalizing morbid excitement & when the system has been habituated to their use they should be relinquished with caution, I have thus mentioned

We come next to the 2d. class viz,

Stimulants. — There, I shall divide into stimulants properly so called or those which remove morbid action by exciting a stronger & less diseased action in the affected part or in some other part of the body by exciting it in another part of the body less essential to life, & into tonics or other medecines which prevent the recurrence of disease by by removing predisposing ~~excita~~ debility, Both of these act by converting excitability into excit.n when they cure by obstructing any of the fluids of the body, wine Opium, are deffusible stimuli, but all stimuli are more or less difficult in their action on the whole system, here I exclude those sedatives which destroy irritability or morbid action by force such as Cerussa acetata, digitalis & miasma, which resemble more the breaking down a door to get into a house than simply turning the key but depletion shond be used in most cases in preference to such remedies, altho depletio is certainly usefull in hemmorages, yet sugar of Lead often does good after it fails, In this case the Lead acts by lessening the excitability, Consumption when cured by Opium & digitalis often returns ——

Stimuli to reduce great morbid action acts as exercise & Labour by reducing excitability, but in general they do

great violence to the system & are much inferior to depleating remedies, They act more safely in muscular than in arterial diseases Some diseases are however beyond the depleating remedies, as Tetanus & the morbid grades of Bilious Fever, Here the Opium & Bark cure by prostrating the system below the morbid action and thereby wasting excitability, A question now arises when are stimulants to be used, This must be regulated by the stage of the disease, the state of the system & more particularly the the pulse, When they occasion heat, a frequent & slow pulse they are improper, If they produce none of the above symptoms but impart a slowness & fullness, they may be used with advantage, & the saying there is a time for all things is in nothing so striking as in medecine.— The manner of giving stimuli is in rotation, I once cured a case of tetanus by giving wine 1st Bark 2d, Opium 3d Brandy 4th & water & then the wine again, but more of this hereafter.——

Of those Medecines which remove morbid action by exciting a stronger & less diseased action in the affected or some other part of the body Stimulants are of this class & should be preceded by reducing the system below their by means of depletion, But notwithstanding this may hold good as a general rule yet there are two exceptions to it.——

1st. when it is necessary to destroy irritability in hemorrages by such Sal, & in other cases by digitalis, 2d. when we wee dissipate excitability as in Tetanus, when excitability is accumulated begin with small doses of stimulating medecines & observe at the same time to defend the system from other stimuli as light conversation exercise &c. For there by hurrying on the system will defeat the intention of the medecine, In pleurisy after bleeding once or twice endeavour to suspend the cough by Opium, but when there is no accumulation of excitability, begin with large doses of stimulating medecines, after depletion especially in chronic diseases & in the beginning of Jail, which attacks excitability nearly exhausted by indirect debility.

Do not combine many stimulating medecines for they generally act best in a simple form, but to this there are some exceptions, Use them in succession or rotation for the system for the system will often become insensible to one stimulus, whilst another of a weak action will affect it — Liquid Laud, when Opium & bf have failed, Dr. Dewitt tells us that a pill of Opium made 6 months before will sometimes do good when a recent one would do harm, it is probable that no two medecines even off the same class exert precisely the same effects, The stomach will some

sometimes bear Quassia & not columbo & vice versa, Chron-
-ic diseases are Intermittants & require stimulants, Frequent
-ly change change the place to which stimuli are to be
applied, When the stomach has been inured to stimuli
apply them to the skin, which still retains its sensibility
as blisters to the abdomen &c. In chewing Tobacco only on
one side of the mouth, that side is much easily affected
by it than the side that is accustomed to it, Even when
snuff is taken into the nostril one only at a time, it becom
more at length insensible to the effects of the snuff than
the other

Opium when ineffectual in large doses in the stomach
is frequently active when thrown into the intestines
Bark after having become inert in the stomach is of-
ten active when thrown into the bowels, Generally when
a medicine is exhibited per Anum the dose should be
quadruple; or externally applied to the skin in the
form of a quilted jacket, Electricity when applied to
the breast of a cock is said to revive & cure the effects produ
ced upon the head by it, Opium obviates the effects of Opi-
-um when applied in another manner from the first, Mer
cury obviates the effects of Mercury thro' the practice be

be not safe — Having admitted that there are specific stimu-
-li we are obliged to admit an indefinite number of them,
but those that are feeble from the various changes of the irritabil
-ity of the system, An Emetic when the Stomach has lost its
~~irritabi~~ sensibility is inert, because it muscular fibres do not vibrate
in union with the medecine, weak stimuli sometimes act
when stronger fail, Strong Purges destroy the contractile
powers of the stomach, when weak ones act by assisting
the recovery of that power, I once knew a Lady who could
not hear the noise made by the firing of a cannon, but could
distinctly hear the noise made by pushing a pin thro a piece
of paper, I also knew a Gentlemen with hemiplegia, who was
not in the least affected by sticking pins into the affected
part, but by touching it lightly by a feather, would imme
diately be convulsed ——————————

In all chronic cases stimulants should be given in the morn
-ing, because at this time the excitability is more accumulated
Barron Homberg says there is a certain relationship kept
up between the different stimuli according as they are given
in succession, Alkali for instance, will restore the excita
bility of the stomach when dissipated by acids, but acids
will not restore it when dissipated by alkalies, Do the alka

his act by exciting the dormant faculty of the stomach?

Of Medicines which remove morbid action in a part by exciting it in another less essential to Life, — Many Physicians do this without knowing this, a head ache is cured by a diarrhoe, Natural hemorrages by bf, Morbid in the viscera by blisters, Dropsy by diuretics acting upon the kidneys, Morbid action of the Lungs by Emetics acting upon the stomach, Apoplexy by throbing on the back, the morbid action being thus transferred, Mccarthy tells us that he gave a dog Nux vomica & then severely whipped him, & the nux vomica had no effect, owing to the impression on the skin predominating in force over that of the stomach, Observe now that there is but one impression felt among those of an unequal force & that is the strongest, 1st. you must reduce the system below the stimulating point, that the medecine may at once predominate over the remaining morbid action, I observe again that there are exciting, depleating, blistering & sweating points which it is necessary for the Physician to know, as that a mariner should know the signs that discover a port —

2d. Take care that the part in which you excite morbid action be less essential to life, than the part in which

you intend to remove it, To this there are exceptions, In consumption it is sometimes proper to create morbid action in the brain by means of Opium or spirits, Here it is better to bring on derangement in the brain, which is more essential to life than the lungs, than to let disease be stationary in the Lungs doing more irriparable mischief, Intoxication sometimes entirely removes consumption, In convulsive Epilepsy deberium has been induced by opium with advantage; In tetanus is often cured by drunkeness, In Pleurisy it is most essential to safe put a blister on the affected part, & in fevers it is sometimes necessary to bring on hunger to such a degree as to endanger life, in order to accumulate excitability in the stomach —

3d to prevent unsuccessfull practice enquire into the peculiarities of the Patient, his habitual diseases &c but in dangerous cases little attention is requisite to the effects of the medecine

4th When the second morbid action which is excited becomes languid a third must be excited, because pain from habit becomes pleasurable

5th To attend to association in diseases, instance, we stimulate the feet in Gout because they are more predisposed to disease When Gout is flying about the body it is proper to stimulate the great toe which has already been attacked by it in pref-

mence to the other, when we wish to induce regular gout by soliciting it to the extremeties,

In stimulants I include the passions such as anger & terror, but the agreable passions most often cure diseases, by preponderating over painfull impressions, I knew a man who co'd releive himself of pain at pleasure from the Rheumatism, by shaving, Pronouncing popular names, words & events sometimes releive pain, Hope & faith have sometimes wonderfull effects in curing diseases

Of Medecines which prevent the recurrence of diseases by removing predisposing & succeeding debility, Here I shall tonics and the rules necessary to be observed in their exhibition are the following

1st They are always to be exhibited in less doses than are sufficient to overcome the morbid action

2d In your choice of tonics always prefer such as are double in their operation, as aliment, in the use of which observe the following rules

1st Always prefer that which is agreable to the staffes & stomack & tho' their shou'd be no appetite, still continue to give the aliment, for who wou'd wait for an appetite to give medecine

2d Recommend to debilitated persons to eat 5 or 6 times a day & once or twice at night if sleepless, Debility is constantly attended with considerable relaxation of the Blood vessels

for the stomach of a debilitated person is like a school boy, who if he be not busy is apt to do harm, a full meal like poison should be avoided

3d. Accommodate the diet to the excitability of the system

4th. Solid food should be preferred, as it makes the most flesh, while liquid food makes the most fat.

5th. The less nourishing is preferable to that which is more so in cases of debility, Salt meat is preferable to fresh upon that account

6th. There are cases in which one kind of food is only preferable, A Gentleman in this City affected with violent stomach complaints was perfectly cured by boiled turnips alone

boiled Carrots are said to cure the asthma, Bread & milk the Gout, a diet solely of fish has cured certain Inflammatory diseases, The Stomach prefers a homogenious food, Beef & mutton has cured dyspepsia & oysters visceral obstructions

7th. a diet by weight & measure of the same aliment cures diseases, Dr. Taylor was cured of Epilepsy by the milk of a cow fed in summer upon grass & in winter upon hay, but was disordered as soon as he fed upon the milk of a cow that was fed upon meth grains

8th. Uniform hours in eating are strictly necessary, sooner after leaving bed in the morning the better.

When it is necessary to confine a Patient to a particular diet we must not give it up too soon, because it disagrees with his stomach at first, after a while it & the stomach may become naturlized to each other ——

TONICS comprehend 3 kinds of drinks, these are 1st. Malt liquors, 2 different wines as Madeira sherry &c. 3d. Low wines as Malaga, Port, Champaigne & cider, You see I do not include ardent spirits in this class, for a man had better die than use this detestable, Pneumonia remedy. In chronic cases they are always injurious, as their use will finally create a use for them which when confirmed by habit nothing can irridicate ——

4 Cold & warm baths remove debility of weak morbid action, The warm bath shou'd be used between 12 & 10 only. — Temperature of the Tepid is 96, the warm 104 & the hot bath 108 of Fahrenheits Thermometer, The warm bath is very much used in Italy. — The cold acts indirectly as a tonic abstracting heat & accumulating excitability & dve fring after the cold bath converts the excitability into excitement, to be the more effectual it shou'd be used after the warm bath. ——

I shall now make a few observations upon Cold ——

1st. It shou'd be preceeded by the warm bath ——

2d. It shou'd be temperate, when the water is cold it shou'd

warmed & vice versa

3d It should be used, 2, 3 or 4 times a day.

4th In a warm room during the Winter

5th Exercise & friction should succeed it

5 EXERCISE holds a great rank in the class of tonics as obviating simple debility & may be divided into ~~active~~ & passive & active, The former includes friction rocking in a cradle chamber horse swimming, sailing &c

The latter are walking, labour &c riding on horseback is partly active & passive

The following are the rules to be observed in the use of Exercise

1st In great debility first begin with passive as Friction, the effects of which are wonderfull in overcoming debility, It increases the action of the blood vessels & muscles, also secretion as well as sensation, The chinese are remarkably fond of this remedy & carry it so far as to have frictors as we have barbers, The exercise of the hands in shuttle cock, the good effects of this we see daily in taylors, shoemakers, Ladies &c swinging sailing & riding in a carriage are the next stage of exercise as they occur in the open air, Swinging is usefull when the patient is not able to take other exercise, It was reccommend by Dr Hogarth & Smith in consumption, I cured one case of this completally by swinging, Sailing creates a disease of the Stomach & thereby

carries of the seeds & effects of the primary disease, It also keeps up a perpetual conflict between the passions, Sailors are generally healthy when the vessel is kept clean, The balloon only used in time of war may be used in debility, Partial exercise as before observed removes debility, A person held one hand in water at 62 & by exercising the other it rose to 68 after it had risen only 64 by the warmth of the house, Riding on horseback is highly recommended in Consumption, It expends less excitability than walking, which may be used in cases where it is necessary to expend much excitability, 2d avoid all fatigue, 3d accommodate it to the state of debility 4th The same rule may be exercised in the use of exercise as of eating, never take to much at a meal as it renders you unable to take more, immediately afterwards without injury, Patients are often in this respect ungovernable,
5th Exercise should never be prescribed before breakfast or immediately after a meal, Different kinds of exercise suit different kinds of diseases, as exercising the muscles of the back in Nephretis, Labour of the arms best in Pulm Consumption
6th Debility is to be removed by change of occupation —
7th Travelling, it removes from the inquiries of friends after the health of the sick which inquiries often do harm, I have known a return of an Intermittant induced by a friend

arising the Patient 7 hours after the usual return of the fever with
or he had escaped, travelling is an agreable & usefull stimulous
from the exercise which attends it, the change of air & the succession
of new objects, 8th Change of climate & of former associations are use
full in nervous diseases, as Hypochondriasis Hysteria &c. Gulep
sy Stone & even, Convulsions are cured by it, Sheep are benefited
by a change of climate, and Men prou long their lives by the
change, especially old people when it is from a Colder to a warm
er one, 9th An uniform climate for valids tho' different from
the one they have been accustomed to is of considerable service
to them to them, In certain cases of debility a warm room from
70 to 79 day & night shou'd be used & in order to keep the room
from becoming to warm, a vessel of water shou'd be kept upon
the stove which will evaporate at a certain degree of heat
& thereby cool the room by its vapour, 10 change of diet, dress
& mansion is frequently of great service. ——
11th Cheerfull company & agreable reading obviate debility
12th advise convalescents to go to bed early at a fixed hour
& to rise at the same hour every morning ——
13th Strictly forbid their going into the night air or moist
weather or gratifying the venereal appetite ——
14th Accommodate their dress to the weather, their dress

had better be 3 degrees too hot than one too cold, It should be loose, there should be no ligatures, flannel should be worn next the skin & they should sleep between blankets ——

15th They should sleep upon a mattress, as a soft bed induces indirect indebility & alternately on the sides but never upon the back in indebility, because the night mare frequently attacks in that posture ——

Of the Medecines which remove debility, of these the bark & steel are the best in indirect debility, Strong drink sometimes cures diseases by knocking out excitability, rousing dormant excitement & afterwards locking it up in the muscles The Indians when fatigued will rest themselves by carrying a large log or two, a mile or more & then laying it aside —

Mineral Waters, They act as tonics by the ingredients they contain, by the degree of temperature & from the quantity taken in at a time, Purging mineral waters are not tonics consequently I am not speaking of them here, mineral waters cannot be imitated by art, they often do harm at first, but after a while do much good, Mineral waters do great harm in increased arterial action, but in Nervous bowel complaints &c they do much good ——

Matrimony is also a powerfull stimulous ——

Fixed air is also a stimulant & may be prescribed with the same precaution as the mineral waters. ——

Mercury in obstinate obstructions, from weak & languid action is one of our best remedies, even when the more agreable fail, In the use of tonics always attend to the state of the system, for debility is the next door neighbour to disease & sometimes even worse than disease, There is a debility, below a certain point, where the patient is unable to walk, as in syncope, Palsy, apoplexy, in which excitability is highly accumulated, here gentle & weak stimuli are proper; A few drops of cold water, friction, smell of burnt feathers &c. will often do more service than the most violent medecines, Friction is generally better in Palsy than the more powerful stimuli. ——

When excitability & excitement are nearly exhausted as occurs in the first stage of malignant fevers & the last in chronic diseases, the most powerful stimuli are nesessary, as Caustic red hot iron, boiling water, fire, coal &c But when a total obstruction of the part takes place, which in animal matter is called gangrene, the stimuli should be applied around the part as turpentine, hot poultices and particularly Blisters &c with the Internal use of Bark wine & Opium

Tonics are exhibited, 1st by the mouth 2d by injection 3d by the nose 4th externally, The mouth is the best channel for medecine. – Opium may be given by the way of glister, in this way it is generally necessary to administer 3 times the quantity of that taken into the stomach to be effectual, Sp of Camphor may be applied to the nose, Dr Chilson, with Camphor & opium applied externally cured obstructed menses with digitalis dropsy & with bark & spirits all kinds of fevers, this can the friction of the hand the principal means of cure, I have known Opium & Camphor desolved to act like a charm in pains of the knee when applied externally to the part, Shoemakers wax & burgundy pitch when applied to the soles of the feet cure head, Spirits to the abdomen, relieve cholic, sweet oil, aschites, & when rubed all over the body has cured malignant fever, a warm hand has relieved Pleuretic pains, The manner in which these medecines act 1st by friction, 2d by exciting a determination of the fluids to the part, 3d By sympathy. sometimes they all three combine The parts to which these medecines may be applied are the stomach, belly inside of the thighs, near the perineum soles of the feet, arm pits, back bone & anus. ——

There are some who have a susceptibility, to one class of Med

-vines in consequence of an Idiosyncrasy.—

Of Medecines which remove diseases by abstracting redundant & foreign matters from the body & which offend by their quantity & quality, these matters are mucus worms &c & the medecines, vomit, purges diuretics anthelmintics, deobstruents sialagogues &c of which we have spoken of before.

Of Medecines which remove diseases by mixing with & thus destroying matters which offend by their quality or quantity thus, 1st Magnesia destroys acids in the stomach by uniting with & neutralizing them, 2d Bilious & renal calculi by lime water vegitable alkali vitriolic acid &c The Itch is cured by Mercury & Sulphur, The venereal disease by Mercury, Demulcents are used to allay cough catarrh &c They are flaxseed tea decoction of bran Sulphur Mercury &c

Of Medecines which cure diseases by removing obstructions These as I said before are not the cause but the effects of disease, They produce disease by reacting & occur most frequently in the visceral & lymphatic glands, thus we see morbid debility, disease & obstructions at the same time, These medecines are certain tonics called deobstruents as Earth steel, Mercury Arsenic, Cold bath, external applications, Local bleeding Fear acts powerfully & I think it is in this way that the very

-al touch acts, I will conclude this subject with observing that obstruc-tions are the effects of acute or chronic Inflammation & where Oil has been used in time they rarely occur.

Of Medecines which are supposed to cure diseases by chang-ing the quality of the fluids or the texture of the solids, There are the gases about which I am but little acquainted & as Dr. Beddoes who once said so much about them, has now rejected them, I think we may regard them as useless.

Of the Medecines for releiving Pain, as pain is the effect of disease, the remedies should be proportioned & accommodated to the state of the system, Pain is sometimes a remedy & should not be relieved, 1st. Opium in large doses releives pain by indu-cing indirect debility & thus reducing the system to the sleeping point In giving large doses, care should be taken, that the seat of the disease or pain, be not in a part where effusions are dangerous as in the brain &c. 2d. Vf releives pain as in Pleurisy, head ache Gout Rheumatism, 3d. Fasting releives pain, Dr. Priestly informed that a criminal that was put upon the torturing ma-chine, bore the pain with fortitude, in consequence of having fast-ed 2 or 3 days before, Those who die of famine never feel pain after the first 4 or 5 days in consequence of loosing their sensibil-ity at this time.

4th Cold water eases pain, when there is great morbid action. This was often experienced in the Yellow Fever of 93 when given by way of injection, it acts as a charm in hemorroids ——

5th Warm water acts as an Anodyne in cases of morbid action Pediluvium often relieves a light head ache. ——

6 Demulcents relieve pain as Poultices, sweet oil, friction acts powerfully in releiving pain, A sheep skin or the maw of a cow frequently cures Cholic in Children. ——

7th Cold water relieves pain when long applied but increases when suddenly applied. ——

8 Cheerful company, hallowing gnashing the teeth & crying all mitigate pain. Women bear Child birth much better by crying

9th Fear chases away pain when accompanied with great morbid action ——

10th Whipping relieves pain, for instance the dog that was whipped after taking a large dose of Nux vomica, by Dr Hartley he also gave Arsenic to another which was also whipped & discovered no symptoms from the Arsenic. ——

11th Sounds relieve pain, I once heard of a Man who was relieved of the pain of the Gout, by making his Servants sing very loud, It is in consequence of this that we seldom see many children cry at the same time, The child that cries the loudest

generally silences the rest, their pain being in a measure relieved

12 Employment of body & mind, General Kosciusko relieved himself of pain by turning himself round.

13th By Cupping.

14 Cold water when pain proceeds from great thirst.

15th Sulphur when pressed between the fingers cures muscular spasm mechanically.

16. Metallic or other sharp pointed instruments.

17 Animal Electricity & magnetism.

18 Counting 100 backwards.

The next and last article in our Therapeutics, is the means of obtaining Longevity. This is not foreign to our subject, In life there is a continual tendency to death & Longevity is only obtained by accommodating excitement to excitability, or the stimuli which support life to excitability. The same rules which preserve life do not answer in all cases, but we are to be regulated by the different states of the system, Let clothing diet drinks amusements Exercise &c be accommodated to the habits & state of the system as varied by age &c.

I cannot dismiss this subject without expressing my regret that there are so few books which are not written empirically few are written to accommodate remedies.

to the different states of the system. Hence the many contradic-
tions in them, Few medecines act alike in the same disease at
different times, thus we see Opium at one time relevies pain
and at another increases it, it is thus with all medecines, In
short medecines are only relatively good, that is they only do
good when suited to the different states of the system. —
When I hear that V.S is prescribed in Fever or in Cynanche
Trachealis, without attention to the state of the system —
I feel as if I was listening to regular bred Quackery. Such
Physicians reminid me of the Bermudian Sailor who on his
passage threw shingles into the sea, in order to find his
more easily back, as well might we expect, that the Al-
phabet when jumbled into a box would fall out in the
form of an Epic poem as that medecines would cure dis-
eases when thrown into the system, without any regard to
the symptoms & stages of the diseases, or in short to the state
of the system, Here Gentlemen we take leave of Thera-
peutics & come next in order to the fourth & last subject
viz — <u>The Practice of Medecine</u>. —

D. The Practice of Medecine

Gentlemen

We come now to apply the Principals laid down in our Physiology, Pathology & Teraputics, to the practice of Medecine, This is the most important part of our science, It is that point to which all our pursuits in the science of Medecine are directed & happy is he who from the principals laid down deduces a rational & successful practice. ——

The question that first arises is what management in diseases is the most proper? It has long been a practice to divide them into classes orders &c. this is what is called nosology, This mode of division was first suggested by Sydenham, it was followed by sullen &c But notwithstanding I received my education in a Nosological school, I have long since rejected it, because the experience & reflection of many years, have informed me that it led to many errors in medecine. ——

1st. Nosology is insompatable with Anatomy & Physiology

2d. Diseases cannot be divided into classes &c like animals & vegitables on account of their several changes, for we often see one disease run into another, from predisposition, time, Climate

season &c, 3d It is incompatible with the seats of diseases which frequently change, the yellow fever in a few days often changes & occupies different parts of the system, I once attended a Lady in this disease in which it first appeared in the bowels & as Nosologists, would term it Enteritis, then in the stomach Gastritis & lastly in the liver Hepatitis of which she died, Many diseases situated in dissimular parts exhibit the same symptoms, Pain is often situated in a part remote from disease & pain has destroyed life. when dissection has shown any disease at all. so here you see Nosologists would have three different diseases, but that would be erroneous for there was but one disease & that morbid excitm. As well might we attempt to divide the rain which falls on the hills as that which falls in the valleys as attempt to divide morbid Excitement.

4th It is incompatable with the causes of diseases, since debility is only a predisposing cause & morbid Excitement the proximate cause & the same exciting cause brings on different diseases, Disease like fire is an unit, let it be brought on by what cause it will, for fire is the same let it be produced by flint flame &c

5th It is incompatable with the proximate cause, namely morbid excitement

which produces different degrees of the same disease as Palsy Apoplexy, Asphyxia, &c. I shall presently show Nosology to be impracticable, It is incompatible with the characters of Epidemics — Epidemics sometimes blend two or three diseases together, Sydenham mentions all diseases succeeding the prevalence of the small pox did homage to it, The chronic fever of the fall frequently blends itself with the pleurisy of the winter, An Inflammation of the Lungs, is precisely the same thing whether it be induced from foul or arises from Cold, & requires the same remedies to cure it Now a Physician who would not believe in the unity of disease will an Inflammation arising from cold, & the other, are two distinct diseases, requiring different modes of cure ——

6th. Nosology is contrary to truth, this I can show from errors arising in Cullen which leads to incorrect & improper treatment It dooms our domestic animals to death who are unable to describe their diseases ——

7th It is Injurious to the Practice of Medicine by preventing us from curing diseases in the forming state & directs us to wait till disease has put forth its genuine colours, I once heard of a Physician in Virginia who was called in to a Patient & waited 3 or 4 days before he prescribed any thing, saying that the disease had not unveloped itself, showing what Class

to what class it belonged to, It includes the diseases of Children for how will we tell when they cant speak, It takes no notice of the different stages of diseases —

8th It multiplies the names of diseases unnecessarially & each disease must have its remedy different, for I repeat it again that there is but one exciting cause (an irritant) & but one proximate cause of disease morbid Excitement, & that the same means prevent Gout & Fever, Never will medecine become perfect untill we learn to attack diseases in their forming state, for the remedies to prevent different diseases are only modifications of prescriptions, for the great indication is the same, Here a Question might be asked, why Calomel is given in so many different diseases? Because it is effectual in diseases of the Lungs, Stomach, Intestines, & in fevers it cures by equalizing excitement. —

9th It multiplies Medecines unnecessarially & does harm by prescribing different medecines for different forms of Morbid excitement, hence the origin of Lungsworth, Liverworth, Spleenworths, Kidneyworths, Braniworths &c. —

The unity of disease reduces the diseases of the Materia Medica to a select number which being varied in their administration will cure every form of disease. —

10th It creates unnecessary disputes among Physicians

who often differ about the name of a disease, I once heard of a Lady in London who being bled was greatly alarmed at a small dark spot near the incision, a Surgeon was called for, who in answer to her Question, what is was? said that it was nothing more than a spot which frequently succeeded & that it would disappear in a few days, This did not satisfy her, & she sent for another Surgeon who made a similar reply, & this alarmed her & she sent for a third, who upon seeing the spot cried out "an Ecchymosis Madame" gave her some trifling medesine to apply to the arm & departed, the Lady was then contented & afterwards held this surgeon in the highest esteem, Remember this Gentlemen & be always ready to Ecchymose morbid excitement untill the unity of disease shall be compleatly established Thus Gentlemen have I convicted nosology of falsehood, Error strife, mischief & murder who will say any thing in its behalf None — then I proceed to produce sentence, Sentence is pronounced — we ought however to know Dr. Cullens names diseases, for many people will thing you do not know how to cure them unless you tell them some name for disease, We should conform so much as to speak of disease in the plewral number Dr. Brown has made another division of diseases into Sthenic & Asthenic

Object to this. 1st. Because debility is not a disease, and 2d. in cases of violent action, Dr. Darwin has divided diseases into those of irritation, volition, sensation & association, But as well might we divide the colour of the clouds upon a windy day; for what has volition to do with diseases when they all originate from one common cause, His principles are borrowed from Dr. Cullen & Brown and consists of a new arrangement, except on the Lymphatics which he has thrown considerable light, His facts have enriched medecine. ——

I have arranged diseases as they affect particular viscera, blood vessels &c. I hope this arrangement is less exceptional than others & that from its simplicity it will not embarrass you, — It is however liable to objections, The same disease leaps from system to system & perhaps before it is cured occupies them all Hippocrates says that diseases are a circle to which there is neither beginning nor end, It is a difficult thing so as to ~~treat~~ disease arrange, as to speak of it in order, The unity of disease altho' it does not require so great a memory as Nosology, yet it does not beget Idleness; on the other hand it requires very close attention to the remote predisposing exciting proximate causes of diseases & also to the state of the system, for instance the unity of disease when regulated by

in the practice of Medecine attention should be 1st paid to the predisposing cause, 2d to the force of the disease, 3d to the intermissions & remissions & exacerbations, 4th to the seat of the disease 5th to the constitution & habit, 6th to the season of the year; for disease in the time of any Epidemic requires a mode of treatment more or less similar to that of the Epidemic, 7th to the debility preceeding the crisis of a disease, 8th to the ~~consti~~ convalescent state, all these considerations show that the practice of Medecine according to the lenity of disease requires more attention than when regulated by Nosology. The unity of disease places the Physician in the situation of a mariner who in the pathless ocean keep a steady eye upon the magnet needle & who has to let go his haylards, furl & unfurl his sails &c hourly as occasion requires, ——

Disease has been defined to be an irregular or difficult ~~action~~ performance of the function of the body & mind, but I shall define it to be simple morbid action & shall divide them into; ——

DISEASES as they appear chiefly & universally in the blood vessels & certain viscera, These affections have generally been called fevers by Dr. Cullen but very improperally. ——

because fever signifies heat & all fevers do not have heat, Nay in some instances there is a deficiency of heat, ~~but principally appears~~ fevers in general have morbid excitement sometimes spasm & heat but principally appears in an irregular action or convulsion in the sanguiferous, but more frequently in the arterial System which predominates so far over the rest, that I shall call it the proximate cause of fever (for an account of which I refer you to my inquiries) There is sometimes a pulmonary fever, the Aortic system remaining unaffected & the contrary, The temporal arteries sometimes pulsate violently while the arteries at the wrist have no irregular action, Fever is as well produced from a defect of stimuli as from an excess, In fevers the excitement of other parts of the body seems to be abstracted & translated to the bloodvessels, There is but one exciting cause of fever & that is stimulous, Chills precede moderate fevers only, all Ordinary fevers are seated in the bloodvessels, Pleura Angina &c. & the local affections here ~~at~~ are the consequences at not the cause of fever, It is very seldom that the arterial system is affected by being brought into sympathy from any of the viscera being originally affected, Inflammatory fever is not the highest grade of morbid excitement in the B. vessels, it sometimes transcends inflammat., It is sometimes so violent as to leap

over the usual forms of disease & terminate directly in death. —

Fever consists in an irregular action or convulsion & induces death without inflammation or effusion. Morbid action alone, I repeat I constitutes disease & its effects are Inflammation, Effusion &c. This distinction is necessary & useful. It enables us to cure fever before either Inflammation or effusion takes place, This idea of Morbid Ex. teaches us not to attend solely to the appearances of the blood, but to the state of the system &c. —

This I shall divide into three classes. —

1st. Such as affect the whole arterial system with none or with little local affections of these there are 13 states or primary forms of fever —

1st. The Malignant state of fever. —

This constitutes the highest grade of of Inflammatory diathesis It is known by attacking frequently without a chilly fit, by Coma, a depressed slow or intermitting pulse & sometimes by a natural slow or temperature or coldness of the skin. The Arterial system is here prostrate. It occurs in the Plague, Yellow fever, Gout & small pox, also in cases of Pleurisy under the care of Dr. Quin of Jamaica, It is the affect of such a degree of Stimulus as to prostrate the arterial system & to produce a defect of action from an excess of force. —

such is the excess of force that it sometimes produces convulsions &c. It may be called a depressed state of Putrid fever & when left to itself frequently terminates in Buboes Carbuncles Mortification abscesses &c.

II^d The Gangrenous D^o This is the issue of a violent Inflammation left in the hands of Nature or accellerated by stimulating medecines, It is the effects of a higher grade of disease than Synochus & it is not the effect of Putrefaction as many writers suppose

III^d The Synochus Portes D^o This is known by a full quick & round pulse without tension, The Autumnal Bilious Fever & cholic, also the gout often appears in this form

IVth The Synocha D^o or common Inflammatory state of fever, this attacks suddenly with chills & is succeeded by quick frequent & tense pulse, great heat, thirst, & pains in the bones, joints, head side &c. These symptoms sometimes occur in the plague Jail & yellow fever & the small pox, but they are the same common characteristics of Pleurisy Gout Rheumatism & now & then occurs in the Influenza, Measels & puerperal fever.

V The Synocula do, here the pulse is small but tense & quick & it occurs in Chronic Rheumatism

& Pulmonary Consumption,

VI th " The Synochus mitis Do

VII th " The Synochoid Do This inclines more to the Synocha than to the typhus.

VIII th " The Typhoid do a low chronic state of fever & is composed of the Synocha & typhus.

IX th " The Typhus do or low chronic state of fever, this is known by a weak & frequent Pulse, disposition to sleep torpor in the alimentary canal tremors of the hands, dry tongue & some instances diarrhoea, It occurs in the Jail ship & hospital fevers, It is generally imagined that when a fever runs on 20 or 30 days it must necessarially be a Typhus; This is a mistake, there are Chronic inflammatory fevers which continue very long & requires very different modes of treatment to what typhus does.

X The Hectic do This differs from all the other states of fever by the want of regularity in the paroxisms & appears to be an exclusive disease of the blood vessels, It occurs in pulmonary consumption some cases of Lues venerea, of Scrophula & of the Gout & after most other stages of fevers, The force of the Pulse is various being sometimes Synochoid, Typhoid & typhus.

XII th. The Intermitting or Remitting Do.

These are common to all the states of fever that have been mentioned, but occur most distinctly & universally in those which partake of a bilious diathesis.

XIII th. The Febricula do. This is that state of fever in which the morbid action of the blood vessels is so feeble as scarcely to be perceptible, It is known to the South by the name of the inward fever, these thirteen states of fever seldom appear in the simple form in which they have been mentioned, but often blend their symptoms & sometimes all appear in different times in the course of a fever, these changes are to be sought for in the changes of the weather &c ——

The Premonitory symptoms of the forming state of fever are 1st. Elevated but natural excitement which is known by extreme hilarity & vivacity increase of appetite wakefulness &c. the remedies are rest, gentle evacuents sometimes a small V.S. &c. It appears more frequently in children

2d Debility this is known by a loss of appetite, giddiness languor disposition to sweat costiveness, sleepiness with disturbing dreams &c. dryness, crispness of the hair, a frequent full, but not morbid pulse, no relish for Tobacco, or Coffee, wine burns the mouth, The remedies are rest gentle stimulants

as Pediluvium warm bath cheerfull society, Laudanum 20 or 30 drops with a little Worts Root, sage tea, diluting drinks, pouring cold water on the body has been recommended by Dr. Currie, moderate exercise of the understanding &c. ——

3d Depression. This is known by a weakness of the limbs inability to stand or walk, lassitude dry & cold skin, distressing dreams chillness, shrinking of the hands & feet, yawning a weak quick pulse &c. The act of undressing has excited it, even travelling in some mild fevers has rendered them mortal, The remedies here are rest, fasting gentle stimulous, as diluting drinks, so as to distend the stomach, a warm bed, going to bed should always be advised, as it gives the system an opportunity of equalizing excitement, while elevated excitement debility & depression encroach upon disease, the system contains one of them, when the fever is formed. a few drops of Tinct Opii or Sp Corne cervi pediluvium &c. gentle evacuents, these are most proper in the forming state, as Purges, Emetics, bleeding, this last should be moderate & confined to a few ℥ which will often destroy it in the forming state while larger quantities will induce it gentle sweats or diluting drinks, discharge of heat through the body by cool & cold water, Dr. Jno Brown speaks of his thunderbolt pill as pushing & purging at the same time. ——

which I believe to be composed of Calomel & Antim Tart only
Besides these there are many other occasional symptoms of the ap
proach of fever, as a hot, dry, parched, but sometimes a moist skin
breaking out of old ulcers, dimness of sight, smell like hepar Sul
phuris, a disrelish for our accustomed stimuli, as tea coffee tobacco
&c: a crispness & dryness of the hair &c &c: The system is daily
exposed to the predisposing cause of fever, the forming state of
of fever consists of the predisposing cause, debility & a small por
tion of morbid action & we can frequently by attending to this
state prevent the formation of any fever, but when formed
can seldom cure it, The advantages therefore of attacking fever
in its forming state are numerous, By so doing we prevent some
times its formation & duration, but its formed the skill con
in preventing death, Dr: Hoghorn says, when a fever is formed
it cannot be cured, but will run into its course, here I agree
with him & deny that fevers cure themselves, as is thought in
G: Britain, but to this there are some exceptions, 1st: Hem
orrages have strangled a fever, has has occured in the west
indies, 2d: In an attack in Cholera Morbus has produced the
same thing 3d: sweating has also, but rarely after the 3 or 4
day, this pringle testifies, 4th: fear & terror have extinguished
a fever when formed, 5 Opium in large doses, taken by

mistake has had the same mistake effect, 6 large doses of bark, 7th a quart of wine or a pint of Spirits has destroyed, tho I have known death from this, & Currie has cured them on the 2d & 4 days by the infusion of cold water never after the 5th on all these I shall remark that they are all dangerous, rendering convalescence slow producing obstructions & often producing death, Finally I shall observe that many fevers cure themselves, Nosology considers the forming state of fever a sacred thing, hence another source of mischief from this many headed monster.—

Of the remedies for fever including the 13 primary forms of fever, when formed they consist of.—

1st Such things as lessen by their abstraction of stimulous the morbid & excessive action of the blood vessels or excite them when reduced below the point of reaction.

2d Such as by acting on the stomach bowels, brain, nerves & skin equalizes the excitement of the whole system & thereby indirectly destroys a weak action in the blood vessels by imparting to them a more vigorous & healthy action.—

1st The remedies which belong to the first general head are evacuents, these are,—

1st V.S, for a full account of the advantages of this valuable remedy I refer you to my inquiries in defence of V.S.—

I shall only mention here those states & circumstances which forbid its use. There are, 1st. It should be used very sparingly in cases where from the excessive force of stimuli the system is prostrated below the point of reaction, of course profuse B. would abstract the remaining small portion of stimuli & hasten death, 2d. after the 3d day of malignant fevers if not used before is improper, as the system is below the point of reaction, The remedies here are purges mercury &c. 3d. In weak morbid action in the Blood vessels or what Dr. Darwin calls a tendency to irritability in the blood vessels as in weak bilious fevers or Typhoid Pleurisy, The remedies here are purges & then cordial, 4th. In diseases of habitual drunkards, It should be used very sparingly because in this case the Blood vessels are so over stretched that they cannot contract in proportion to the blood drawn, 5th. Copious bleeding is forbidden in very fat people, 6th. In pestilential fevers, here the system is so far prostrated below the point of reaction that It is even improper in the first stage, It has been forbidden after the suppurative process has begun in Inflammatory affections, but to this rule there are frequent exceptions

It is seldom necessary after copious expectoration has taken place in Pleurisy, but if plentifully used before, expec-

toration has begun, it will cure the Pleurisy & prevent the expectoration, In the year 1798 in this City it was the case The symtoms were first raised by gentle purges after which I employed V.S. 7th In diseases of external determination as in Pleg-mon, Angina, Tonsillaris &c without evident symtoms of suffo-cation, In Pleurisy after copious expectoration, & 8th when there is an alarming & dangerous symtom from the dread of the lan-cet, but in all these cases the pulse is the index, there are however some cases of Hepat Homoptysis in which I would not bleed altho' the pulse be tense before it was reduced by purging. & Lastly there are some cases of Hemorrhagy with a tense pulse & Hepatic fever, which cannot be reduced by V.S. But there are some stages in other diseases in which the Pulse is dumb, 1st in certain morbid affections of the lungs of the brain, In Malignant fevers, In chronic Inflammation of the Liver; But shall our estimation of the pulse be lessen-ed because it does not always show the disease, No Gen-tlemen the mariner never keeps his eye from the compass tho' it may vary constantly, Great skill is necessary when the pulse is absent or deceitfull, V.S. is frequently necessary in cholic, Strangulated Hernia & gall stones when the pulse is natural & I have even bled with advantage when it was

feeble, Bleeding is either general or local, The first by the Lancet the 2d By cupping leeches &c. which last are of service in local Inflammations as Opthalmia

2d Vomits. These are forbidden, In persons subject to a spitting of blood, in Cephalic congestions, In fevers of great morbid action as hematameris, ruptures &c. They are usefull in diseases of moderate morbid action as In Pulmonary Consumption &c. They are more safe in children than in Old People & more safe in old than middle aged persons. In Pregnancy, in persons subject to Cephalic complaints or ruptures they should be prescribed with great caution To be effectual they should be given frequently, I have given emetics every 2 or 3 days in the Scarlatina Anginosa with success agreable to Mitherington. Nature sometimes cures diseases by Cholera Morbus & hemorrages as in the Y. F. of 1793; The best emetics are Tart antim & Ipicacuanna where Emetics are proper the less liquids taken with them the better.

3 Purgs, are Indicated in fevers of high morbid action there are better & more safe than Vomits, They invite disease from other parts to the Intestines by creating a weak morbid action in them, They are numerous, Calomel &

Jalap, are the most proper in bilious complaints & should be given once a day, they are usefull to take off pressure from the bladder, whenever the faeces shew a disposition to pass of by the bowels in a fever, the bowels should be opened 3 or 4 times a day, or diarrhoe should be kept up 3 or 4 days by Calomel & Rhei & if necessary Clysters should even assist, they relieve the Aorta kidneys &c. from the pressure of faeces, they disturb the system less than purges, It is to be lamented that the prejudices of prevent our obtaining their beneficial effects, A Clyster syringe should be part of the furniture of every family, By stimulating the rectum too we divive morbid excitement from the other parts of the body, Suppositories should be used which are soap, aloes, &c. ——

4th Diaphoretics. These act by stimulating & are improper in fevers of violent morbid action, They are stimulating medecines liquid do. Nauseating do, these are improper, we should never make a sick stomach but on the contrary relieve one, warm bath acts as a powerful sodarific, when it sweats it does good, but on the contrary when it fails it does harm, I find warm bed cloths to answer much better. — Cold bath this reduces morbid action without induc-

-ing sweat, when the heat of the body is above 100. Hot sweet oil rubbed over the body produces sweating. The great weight of bed cloths, this is perhaps the best method. The warming Pan, Bottles or Bladders filled with cold water, hot drinks covering the whole body over & breathing the Nitrogen Gas for some time Sweating should be proportioned to the strength of the patient, when in fevers nature shews a disposition to relieve herself by sweating, she should be aided by sadorifics, But here its often necessary to precede sweating. Bled, by V.S and other depleating remedies sweating should be sometimes continued 24 hours & in other cases, The Patient should often change his linen when sweating, The Internal sweating medecines are 1st. Nauseating medecines these have seldom done much good but harm, diluting drinks these acts by lessening acrimony &c. There are many medecines which are recommended to produce sweating they should be combined with Opium -

5th Salagogues, There are Mercury & Mercury seldom salivates in any fevers, but those which run their course in 4 or 5 days it seldom reaches the mouth, The morbid action transcends the stimulous, so that it cannot -act

the Mercury cannot act, when the system is so prostrated that it cannot react, Mercury is our own remedy & happily for us it soonest has its effects There is a certain point at which salivation should be commenced, Mercury may be either used internally or externally by friction with the ointment rubbing Calomel on the gums & fumigating. when salivation should be brought on speedily all these methods are to be used with the mercurial bath, But there have many disadvantages as ulcerating the cheeks gums & tongue, Mercury is only a medecine of necessity.

6th Blisters, are usefull when the pulse is descending to the Phymochoid & typhoid states, It is a good sign when blisters lessen the frequency of the pulse & increases the strength of the body; they are the weakest of all depletions, & should never be used in fevers of violent Inflammatory action Jackson says they are improper in a hot & dry skin, recollect how they were forbid in our Therapeutics, From a review of all the substitutes for them find them all inferior to it, it does no violence to the system or senses, few even die from an improper use of it, while thousands die from a libre use of vomits purges &c &c

Remedies which abstract the stimulous of heat; There are

Cold, in the forms of cold air, water & Ice

1st. Cold Air this acts negatively in abstracting heat, It should be proportioned to the heat of the body, when it is at 100 it should be used, also it should be proportioned to the state of the system, for if 62 were agreable in health, 50 or 45 in sickness is best, It was for this Sydenham recommended to his patients to get out of bed & walk in the cool air & if not able to be dragged out, Many persons forbid rising out of bed, here the bed cloths should be removed so that it may have excess to every part of the body.

2d. Cold water, This is useful when there is great morbid action with a dry hot skin, Bruce says the natives of mafura cure their fevers by lying in their beds & suffering themselves to be drenched with cold water, The modes of using cold water are many, 1st. by applying it to the whole body, this method should not be used unless a great deal of exersise is taken with it, so as to expend excitability as well as reduce excitement, 2d Sponging the body with a sponge dipt in water, Currie recommends this way when the fever was formed, 3d. Placing the hands & feet only in cold water, I have seen the happiest effects from Clysters of cold water, They operate in this way not only on the bowels but on the whole body, they act in 2 ways.

The external application of cold water by ablution is improper, ablution is proper in the forming state of Fever, it is the safest way it arises from two theories, one the existence of morbific matter, the other of spasm of the vessels — Dr. Currie has most erroniously said, that whenever cold water may be applied to the body, it may be taken into the stomach, 1st. In the early stages of Fever before the reduction of morbid ~~action~~ excitement,
2d. In sweating, 3d. In morbid action or congestion of the Lungs liver head, bowels &c. 4th. where the heat of the body is very intense, water externally is very improper, 5th. It is improper in the cully fit of a fever & when the body is covered with sweat It is improper in the first stages of Local inflammation.)
3d. Ice, This is particularly useful in affections of the head It should be pounded & applied inclosed in a bladder, to the head or part required, or in a tin cap, On Ablution I shall make a few remarks, Dr. Cummins of Antigua recommends the use of Spirits instead of water because evaporation is much quicker induced by it. ——

1st. Ablution excludes all other remedies ——

2d. They require a regard to many circumstances which requires the attention of the Physician himself ——

3d. I object to them in fevers for I believe other applications

Would produce the same effects, as washing the hands feet neck face head &c. It should never be used as a stimulant in low fever, as typhus, for it frequently produces death, also abstinence by depriving the system of its natural quantity of stimuli & should be proportioned to the excitement of the system, Milk, butter and Spts &c. should be forbidden, diluting drinks &c. should be used, roasted apples bread water &c. (see Johnsons Nurses guide edited by Coxe) also other remedies which abstract the stimuli of

4th, Sound & Light by silence & darkness, Sound & Light should be gaurded against with the utmost care, in great morbid action, Conversation has often done harm, delerium is often the consequence of it. ——

5th of the Invigorating Passions, by moderate fear this has often had great influence in fever & in lessening the Pulse

6th Of motion by rest, Journeys walking &c. have frequently occasioned fever, when there is only a slight indisposition walking or any gentle exercise will cure it, but when indisposed during the prevalence of an Epidemic, the Patient should surrender himself to rest & quietness. ——

7th Of Acrimony, by diluting drinks & cleanliness diluting drinks lessen the heat of the fever & the acrimony of the fluids & bile, So much cannot be said of them

They are toast & water, Barley & apple water, certain teas of which Calm is the best, tamarind water, the different jellies dissolved in water, dry cherry water, &c. these should be often changed that the Patient may not in consequence of using any of them to long, acquire a dislike to them, None of these drinks should be given cold as they frequently produce reaction in the system & its consequences. —

Thirst should not regulate drink any more than appetite does food in fever, therefore when there is great thirst it should not be indulged, the drinks should be given in small quantities & when there is no thirst, we should give them even when not called for. Cleanliness is also very proper, the teeth mouth & skin &c. should be kept clean. —

Remedies, which direct local morbid excitement, congestion inflammation & serous effusions from parts that are essential to life, in the first degree to such as are less essential to life; these are all such as are mentioned under the head of Evacuants also —

1st. Nitre, is seldom borne in gouty habits & bilious diseases Gent, attend to this, Nitre & other neutral salts, nitre acts powerfully upon the stomach, which is evident from dyspepsia succeeding the too free use of it, It also lowers the pulse it lowers the pulse in frequency & force & its action upon

the Blood Vessels is powerfully sedative, Imay be given in a dose from 10 to 12 gr every two or three hours, Nitre ℥ss & vinegar ℥ss is an usefull application in Inflammation &c. It is not necessary that it should produce Nausea, dose from 10 to 20 gr

2d The preparations of Antimony of which Tart Antim is the best, it excites a revulsive action in the stomach, sweates an artificial weak part, It should be combined Nitre or Antimonial Soucha acts as a sedurific without stimulating the whole system hence its great use in Peripneumony

3d Sugar of Lead, This has been given in the hemorrage state of fever with great success, Sir George Barker gave it with great success in internal hemorrages

4th Dr Glove, This lessens the vivitability of the whole system, It should never be given in a low pulse, In the Dropic & Pulmonary states of fever it has principally been recommended. Dr. P. has had no experience of its use therefore can say nothing of it, It has been lately used in Synocha & Synochula states of fever, but I think it should never be used but with the greatest circumspection, Sweet oil externally applied in fevers of great morbid action has been of great service, this I refer from its use in Local Inflammation — Dr. Jackson tells us that the sweet applied as just mentioned, lowered the Pulse

Nitre dissolved in vinegar has been used Dr. Stuart of this City has lately mentioned the good effects of ligatures in morbid action by stopping the return of venous blood, Dr. Stahl mentions the power of wakefullness" No one says he knowns the effects of wakefulness, I have frequently witnessed the good effects of this & have sometimes seen a patient make delerious, Here before I conclude the account of remedies for diseases of great morbid action in which I include Synochus fortis, Synocha, Synanchula, Snynochus mitis, & Snynochoid, I beg leave to add the following Indian remedies, 1st powerful friction, Capt Cook was cured in one of the Friendly Islands of the Rheumatism by a native, 2d violent labour or exertion the Indians cure mania by this means 3d strong stimulating powers, they often cure Pleurisy by stretching the arms or swinging the arm of the affected side 4th Hot & cold bath, these are proper in external diseases, In tonic mania, Indian constitutions, they are only indicated says Dr. R, in diseases which have external determination, But none of these are equal to V.S. & its auxillaries, as Purges Vomits &c. Before we come to treat of stimulating medecines, we will say a few things respecting these states of fever, where both evacuents & stimulant may be necessary, as Typhoid, Bilious & Pleuretic States of fever.

The Typhoid & typhus creep on gradually sometimes with feeble chills, the skin & edges of the tongue dry, with head ache, continue, 30 or 40 days without intermissions, Vomit frequently choke it in its forming state, but large bleeding, Bark & wine do harm, It is sometimes best to wait awhile untill it wears itself compleatly down to a typhus, only obviateing urgent symptoms. —— The remedies are 1st. moderate V section or twice when the pulse is tense, 2d. Vomits there are safer than V they as it were untie the typhoid net, 3d. Gentle Purges, Nitre, Blisters, cold applied to the skin &c. & should be continued untill the action be nearly worn down, In short the remedies for the typhoid state may be summoned up under 3 heads viz abstule sustine et siste, The indications are 1st. to equalize excitement 2d. to excite another action, give stimulants but gentle & if they do not render the pulse slower & fuller discontinue them, Jackson speaks highly of the effects of gestation but says that it should not be used untill the fever has run its course & think very properly. ——

Of the primary forms of Fever which require stimulants, there are such as forbid depletion as 1st. Malignant 2d. gangrenous which arises from not depleating in the first stage of disease or suffering it to terminate in itself

It occurs in the small pox, pleurisy, plague, Y Fever, & Gangrenous sore throat, This is the typhus Gravior of Cullen, known by nearly a paralitic state of the blood vessels, hemorrages bouboes, carbuncles, great muscular strength & pain, or the absence of both, absence of mind &c. 3d The low chronic state of typhus or fever &c. This is the typhus mitior of Cullen, known by delirium coma, languid eyes, fallen jaw black tongue, & teeth, also dry tongue, coldness of the extremeties, costiveness or Diarrhœa pale urine, dry skin & at the close by typhomania & little cough, The Pulse has an irregular stroke, when stimulants make the pulse slower & more full they do good, when they render it more frequent they generally do harm. - This is the effect of debility it follows inflammatory fever, or may be primary & requires stimulants. ———

2d The remedies which belong to the second general head are stimulants, these divide themselves naturally into such as are stimulants internally & externally, the internal may be divided into medecines & aliments, The first are all fermented & distilled liquors, Before I mention them particularly it will be necessary to give a few rules necessary for their use 1st We should begin with small doses of the weakest stimuli & gradually increase them, 2 give 2 or 3 at the same time

3d Give them in rotation 4th Constantly. The fermented & distil-
-led liquors are such as wine, malt liquors ardent Spt. Wine
is a pleasant & cordial remedy & medecine is nutrious as well as
stimulant, since it contains spirit saccharine matter, acid & wa-
-ter, the quantity of it should be regulated by the state of the sys-
-tem & quality of the wine, white wines are most proper when
acidity prevails in the stomach, but in cases of extreme debil-
-ity the pure wines are the best such as madeira &c. From 1 to 3
quart may be taken daily in most cases, Persons in health are
much better more easily intoxicated by wine, than when they
are much debilitated. — Of Malt Liquors, Porter is
to be prefered from one to three bottles may be given during the day
Ardent Spirits these should be only used when the Pa-
-tient has been very much accustomed to them, or when a sud-
den effect is desired from the stimulous, These last are stimu-
lating without affording any nourishment. —
2d Volatile Alkali, This has great effect in this state
of fever & may be given from 5 to 10 gt. 2 or 3 times a day. —
3d Empyreumatic & aromatic Oils, also certain
fœtid animal & vegitable substances; of the first I will
only recommend the Oil of Amber which is an excellent
stimulous in the Hiccough which occurs in the low stages

of fevers, from 5 to 20 drops every 2 hours. — of the 2d I shall only recommend the oil of mint. I have never experienced the great effects that have been ascribed to Musk & castor, the succeed the allum Gracum &c. which were used in the ancient & superstitious days of medecine, they would universally go out of practice if Physicians knew as much as they ought of Opium tonic &c

4th Opium, This is a host of stimuli itself, all others may be compared to the feeble rays of a candle, while Opium may be compared to the powerful ones of the Sun, While other stimuli appear to act partially upon the different parts of the system. Opium appears to act upon them all. It acts on the stomach in large doses producing Inflammation of that viscus &c. On the brain producing hilarity &c. On the Bloodvessels rendering the pulse more tense & feeble but less frequent, On the alimentary canal producing Costiveness, On the Kidneys & bladder promoting the flow of urine, on the muscles by relaxing spasms On the skin producing sweating itching & eruptions. —— That Opium differs from other stimulants in some respects in producing these is certain. But what two stimuli perfectly agree? they all vary in their action upon the system, thus bitters act principally upon the alimentary canal. Æther & volatile alkali upon the nervous system, Spirits & fermented

Liquors upon the Blood vessels & nerves, Oil of Amber upon the Muscular system & Opium on all; It differs from most or all of the Narcotics that act upon the brain & nerves, it is to this ascribe its familiar action in inducing sleep; In a neighbouring state in the year 1769 a Gentleman took a table spoonfull of Laudanum mistaking it for a neutral mixture, he was thrown into a sleep in which state he continued 48 hours & awoke perfectly well - Since the American revolution it has been used a little in Great Brittain in Typhus fever. — In its exhibition the following directions are proper, 1st great attention should be paid to the pulse, 2d begin with moderate doses, 10 or 12 drops will do more good than twice the quantity, It acts in two ways 1st By raising the system to the sleeping point, this last method is dangerous in fevers, when below it & 2d by carrying the system directly to the sleeping point, 3d give an increased dose according to the increase of the debility Dr Boquet took 100 gr. of Opium & a pint of Ether in one day to cure the Cholic, In cases of indirect debility the doses should should be small, Dr Sydenham relates a case of a man who died in consequence of having taken 20 drops of Laced to stopt a vomiting. He had taken an Emetic & was debilitated, his excitabilite was accumulated. —

& the Stimulus of the Laudanum destroyed him. 4th It should be given in small doses during the day but larger ones during the night because there is a deficiency of stimulous in the night whilst in the day there is an additional stimulus, as wakefulness. —

5th In all cases of sudden debility begin with small doses

6th It should be laid aside for 2 or 3 days after loosing its effect

7th When it ceases to operate on the stomach give it by injection with double or treeble the dose. —

8th In proportion as the Patients recovers & the excitability increases the dose should be lessened. —

5th Ether, This is a quick and powerful stimulant & is sometimes used with advantage after Opium has failed, in the dose of 30 or 60 drops every hour. —

6th Bark This has many advantages in fevers & acts as a stimulant, we should begin with the infusion provided it has not been used before, then with Huxams Tincture which has many advantages by having bark & Laud combined & lastly if it should offend the stomach, Gentian or Columbo should be combined with it, which are much inferior to Bark, A Spanish physician used ℥4 of Bark a day in a Case of Malignant fever, but Dr. Alpini tells us he found bark & Coffee aa ℥i infused in 1℔ of water to be of equal efficacy

I have substituted the following formula of Bark & Coffee each a spoonfull, water ½ a pint from one to two tablespoonfuls every 2 hours. ——

7 Mercury, I have used this with advantage in these states of fever & was led to the use of it from seeing its goods effects in the Typhus state of Cynanche Maligna. 2d from the cure of Typhus in a Gentleman from accidental salivation, & since that time from the benefit derived from it in the malignant, Gangrenous & Typhus fevers where V.S is forbidden. ——

8th Pure atmospherical air, not simply cold air, too much cannot be said, of this, in favour, in fevers, Its effects are wonderful in the cure of Malignant Gangrenous & Typhus state of fever, Malignant fevers are frequently changed in the West Indies to Intermittents, in consequence of removal into pure air when a removal is desired the Patient should be conveyed as quietly as possible, but when this cannot be done the following substitute should be adopted, 1st Remove the cause or causes corrupting the air & make a fire in the room, 2d the Earth absorbs contagion & poison, hence we see Cats & dogs scratch holes in the ground & breathe in them in order to get the pure air, Also certain nations as those of Genesee when bit by poisoned snake dig holes in the Ground with success. — Hence also

the floors of Hospitals should be of dirt, it is from this reason that the poor people are generally healthy, when fire cannot be had Dr. Campbell recommends 2 tubs to be placed into the room the one to carry off the vitated air while the convey the poor into the room, 4th. Smoke has a wonderful effect in these fevers, — Dr. Bruce tells us that the poor in Cafsavats who lived in smoky houses escaped the Plague. 5th. the deflagration of nitre or the decomposition of the Muriatic acid by the the Sulphuric, 6th. having the bed in the middle of the room, I observed that in the Hospital during the revolution. they died that were nearest the walls soonest, & bereft of its curtains, 7th. that no more person be admitted into the room than that are really necessary 8th. No person should set upon the bed side, 9th. the excretions should be received into cold water & conveyed from the room as soon as possible, 10th. The linen & sheets should be changed daily 11th. the floor should be sprinkled with cold water instead of vinegar, because in 2 or 3 days the vegitable matters contained in the vinegar will putrify & assist in vitating the air

9th. Oxygen Gas, this has been highly recommended but I cannot say any thing from experience. —

10th. The Invigorating of the Passions & Understanding Anger once cured a man of typhus fever in Jamaica —

Fears have often done the same, Courage or pronouncing great or popular names, Joy from seeing absent friends good news &c have only done much service in these states of fever, a Lady in this City was once snatched from the grave by the sight of her Patrons Lover, Hope should be inspired into our Patients, as it is that cordial which we have most under our command, Gloomy visitors should be positively forbidden, but a pious Clergyman should be admitted be cause his conversation will tend to reconcile the Patient to his destiny. ———

11th Stimulating Injections into the bowels, these have often done service & they are numerous, The most valuable remedies for this state of fever are Barb wine Opium, Warm bath, The aliments include include such animal & vegetable matters as are commonly used in diet, together with Sallaop Tapioca Arrow root & the like. Animal food may frequently be given in a solid form to advantage, I once cured a Gangrenous small pox by indulging the Patient in this way, It acts in two ways, 1st by the pleasure it gives the patient to think that it is in his power to eat, & by its stimulus in the stomach, 2d by affording a matter for red blood & that by repetition producing of the most powerful stimulus of life. I am induced to believe that the low fevers

are often cured by animal food as ham, beef steak &c. In the cure of it two directions may be necessary, 1st. do not suffer the patient appetite to regulate you, 2d. great care should be taken to tempt the patient to eat, by changing his food &c. for as the appetite often exists without digestion, so may digestion go on without an appetite. ——

The External Stimulants are. ——

1st. Several of the Internal, so prepared as to be applied to different parts of the body as the nose temples limbs & the external region of the stomach & bowels, They are flannel wrung out of hot brandy, the vapour of vinegar to the nose & mouth, washing the hands & face in vinegar, Cordials, Wine barks given in Injections. ——

2d. Cold & warm baths, by lotions or Infusion over the whole body, Cold bath has been recommended, but it is not safe when the system is below the point of reaction, In the Gangrenous state of fever it has hastened death, because the exertion of Undressing & dressing was to great a stimulus for the system to support, but when water is applied by means of a sponge or dashed on it may be of service, the warm bath is equally unsafe & shou'd only be used by means of Flannels, bottles or bladders. ——

3d. Blisters, These have been spoken of in our Therapeutics, they may alternate the symptoms but seldom the removes the disease. ——

4th. Cataplisms are Salt & vinegar, flour & vinegar, Onions, Garlic, Mustard, &c. to the feet, These are often useful in the using of them we should begin with the weakest & gradually rise to the strongest, these are better than blisters. ——

5th. Certain applications calculated to irritate and Inflame the skin, as Ether & the ℞ of Cantharides combined, which is an excellent external application, the Volatile liniment with the tincture of Cantharides. ——

6th. Caustics, These are often necessary to revive from a comatose state, They should be applied to the bottom of the neck. I have often derived much benefit from them when nothing else was of service, they are indicated when V.S is forbidden. ——

7th. Boiling water & scarifications, act similar to caustics, an Indian Physician has lately recommended friction with a flesh brush, all these and sometimes coals of fire have been used successfully — I know a Lady in the last stage of malignant fever, to be entirely burnt cured by being by a candle upon the breast, Dr. Physick relates a case in which he thought a sudden cry of one of the family that she was dead cured her. A few questions may be asked to which I shall

Answer, are sweating medecines proper in Typhus? No, a softness of the skin, is favourable, but a profuse sweat is injurious, it exhaust the patient to no purpose, Spontaneous sweats often precede death, — Shou'd patients be allowed to sit up. No, the patient is to weak, any thing that is given shou'd be poured down the throat while lying Clothes or other things shou'd be used to receive their fæces, or what passes from them, I have known some instances in which the patient has expired in the close stool, are cold drinks proper, No, the patient frequently asks for them just before death, owing to the morbid action retreating to the stomach or fauces in the last & strong hold, Is purging proper? No, unless there be a great accumulation of bile, Clysters shou'd be used to produce a stool every day, but there are cases in this fever in which the retention of the fæces 2 or 3 days is really proper, the urine shou'd be drawn off by Catheters & particular inquiries shou'd be made respecting its time of discharge, as the patient is sometimes insensible to its great stimulous. — Warm drinks are generally proper. — Is sleep proper? this depends upon the state of the pulse, if it be active, sleep may be admitted, but if faint the patient shou'd be awaked every ½ hour, to take aliments & medecine where the pulse flags, I wou'd have you to recollect that life is more languid in the sleeping than in the waking state

hence death often occurs in the sleeping state from the total abstraction of stimuli & patients generally die in the night for want of these precautions just mentioned, — I have called these the malignant Gangrenous & typhus forms of fever, but frequently change into others, I have seen the Inflammatory change into the typhus form & the typhus into the Inflammatory ~~change into the typhus form~~, after some weeks, In such cases frequent visits are necessary, The low nervous changes into the typhoid, all of which at different periods require different stimuli; The forms of the Malignant & Gangrenous differ, sometimes in beginning with eruptions & sometimes with ending with them, being sometimes preceeded & at other times succeeded, by the same appearances sometimes requiring weak & sometimes strong stimuli & vice versa, — In a fever at Illinois, all died who took the Porter perum, while those who took a decoction of the willow bark recovered — The human body is not like an old house which can repaired by new materials it requires different stimuli & different degrees of these stimuli, I will here hold risque assertion, That if a Physician could possible be with his patient have absolute command over them, accommodated his different to the state of the system &c. that it would hardly be possible for the patient to die of low nervous fevers —

A Judicious Clergyman used to say he first considered his congregation & afterwards accommodated his sermon to them. In like manner ought a Physician to study first the constitution of the patient the state of the system of climate &c. & then consider the medicine proper for him. I have to observe that few of the observations of Europe on diseases are applicable to those of America. ——

The condition of the system - I repeat it again should govern the prescription, as fever as the sails of ships should be turned to suit the wind, I formerly thought the typhus was not an original form of fever of fever, but I have since changed my opinion & I believe wherever it comes from Pandarous box stamped in the original with the form of fever, this fever may become chronic by saving life — but suppose its violence was so great as to terminate in 3 or 4 days my life it might be enabled to run the whole course of 30 or 40 days with which it was originally stamped & thereby death prevented I lost two sailors in the spring of 1803 in the typhus, it never the less spun out to its time for 30 or 40 days - It is often I believe sweated by a scanty depletion in Malignant & other Inflammatory fevers when I first settled in this City the most common type of fever was the Intermittent, which at last changed to a chronic, the chronic to a bilious, & the bilious to the yellow or malignant fever. ——

Many die of weakness after fever - like General Wolfe in the arms of

Care should be taken to obviate debility succeeding disease. This may sometimes be done by a few drops of Laudanum.—

Of Convalescence.—

This is a disease consisting of debility excess of Excitability & a little morbid action or several febrile symptoms, It is attended 1st with wakefulness 2d often a hawking & vomiting bile in the morning 3d defect or excess of appetite, 4th an ascarcus swellings of the limbs this occurs more particularly when Vf has been neglected. Also Ulcers, Abscesses, Coughs &c 5th obstructions of the liver & spleen &c 6th Ulceration parotid & inguinal glands, 7th an impaired state of the nervous, defect of speech & even paraphonia.—

8th a change of the colour of the hair & even a loss of it sometime 9th Costiveness & a yellow colour, 10th Feverishness especially in the afternoon & pulmonary affections, 11th an impaired state of the mental faculties & even sometimes of the moral powers.—

The remedies for these are first cordial drinks as porter &c 2d Cordial & nourishing diet, beginning with chocolate & then chicken flesh, &c &c. The meals should be frequent and a small quantity taken at a time, 3d the usual stimuli should be applied gradually, the gratification of the venereal appetite & the exercise of the mental faculties should be avoided, all immoderate eating & drinking should be avoided.—

A Salivation would be of service in fevers if it only were only to prevent an excess in eating by the soreness it occasions in the mouth. The sudden appearance of friends should be avoided, a change of place dress or to an other room is proper, for the vials, papers, pill boxes never fail to carry with them a sedative effect, Huxams tincture it is an excellent restorative, a table spoonful two or three time a day in wine, a Gentleman who caught a pleurisy in going out a Gunning could not get well untill the gun was removed from the room, a change of dress & shaving &c. gentle exercise in a carriage but not so much as to fatigue, The sight of places & objects to which we have been accustomed is as it were a removal of our contrast in life, warm clothes in the day & warm bed clothes at night &c. &c. the rules for convalescents are 1st. to avoid infectious places, 2 purging, 3d. sitting or standing in a current of cold air &c. I shall now enumerate the remedies for the above symptoms, 1st. wakefulness this is cured by Laudanum 5 or 10 gutt or what is better a bit the bread cheese & porter, 2d. vomiting this depends upon the state of the stomach & may be cured by a little aliment over night 3d. a defect or an excess of appetite, the first may be cured by bitters bark Columbo, Huxams tincture Elixir vitriol & the latter by abstinence 4th. anasarcous swellings of the limbs by rubbing them upwards & in the morning only rest &c.

In Ulcers Pringle reccommends stimulating plaisters. —

5th. obstructions of the liver, 6 & mercury mercurial ointment may be rubed on the affected part, 6 Ulceration of the parotid & Inguinal glands, by stimulating plaisters &c. 7th an impaired state of the memory &c. these are generally difficult to remove especially of long standing, & sometimes end in fatuity, they may be sometimes removed by exercise & the cold bath, 9th costiveness & yellow skin, Calomel & Rhei &c. Regard must be had to the character & conduct of nurses who have it in their power to give or withhold the aliment or medecine at pleasure & that Physicians will do best who guides the medecine himself or if it be not in his power to do so, to choose such a nurse as may be depended on. ———

The following are the consequences of fevers at sometimes, 1st. a Sudden growth in the whole body especially in young people 2d. an increase of fat, 3d. they sometimes carry off chronic diseases Dr. Lowdice mentions the Gout being cured by the plague, 4th. remove barrenness. this is effected by the remaining debility which accumulates excitability & leaves a broad surface for the stimuli to act on, imparts vigour to the body &c. the Malignant & gangrenous states of fever are often the effects of cotagion of which the following are the causes viz

1 Confinement in one room, 2d neglect in changing linen &c. &c. 3d In not washing the skin, 4th Confined persons together, excrements &c. The means of preventing them & contagion are 1st washing the linen, bed clothes & burying the excrements Happily however for the united states human contagion is scarcely known. —

Intermittents. —

They are those forms of fever which have paroxisms, intermissions & remissions, when they are without a chill they are dumb called. Continued fevers when they pass the 20th day generally become septurinary, Intermittents are generally protracted to an immoderate period, they have been known to continue 20 or 30 years yet they are not incurrable. — Intermittents are Quotidians which have their paroxism every day. Tertians having these paroxisms every other day & lastly quartians which have their paroxisms every third day or in the space of 72 hours, The quartian in the Evening the Quotidian in the morning & the tertian at noon — the paroxisms of intermittents are said to anticipate & procrastinate, as when they precede & succeed the usual time, the former shews the decrease & the latter the decrease of the disease, From the accession to the going

The Intermittent is divided into Quotidians
Tertians & Quartans —
an Intermittent is known by the following signs
1st the hot stage succeeding the chill
2 by the duration of the cold stage
3 by the discharge of Bile during the Paroxism
4 by the time of its attack
5. by occurring in climates that are neither very
hot or cold —
6 the urine secreted during the fit of fever is
clear, while that of the internal is turbid and
of a brick colour, in hectic fever Vice versa

" is clear.

to the going of a fit is called the paroxism, from the end of the paroxism to the beginning of the next, is called the interval. Intermittents produce dropsy & other incurable diseases both chronic &c. They are very much influenced by the atmosphere. They have been sometimes brought on by salivation, which sometimes intermits, The Gout sometimes appears in an intermittent form, the Intermittents appear in three forms 1st. malignant 2d. In highly Inflammatory 3d. In the mild form all of which require different treatment, a fever is know to be an Intermittent.
1st. from the hot stage succeeding the chill & occurring in the seasons that Intermittents are most common
2d. by the duration of the cold stage 3d. by discharge of bile during the paroxism 4th. by the time of its attack
5th. by occurring in climates that are not very hot or cold it is very little known in the W. Indies, or in climates uniformly hot or cold, 6th. the urine secreted during the fit of the fever "while that of the interval is turbid & of a brick colour, In intermittents if the system be low, give cordials, but if it assumes an Inflammatory type V.S is necessary with purging vomits &c. The state of the pulse, intensity of pain, vomiting should determine the quan-

tity of blood to be drawn & Dr. Wolmer says that in the In-
termittents of Jamaica he was obliged to ℣ while in the
yellow fever he never found it necessary. I suppose that
in the latter the system was reduced below the point of
Inflammatory action, we had a case of an Intermitten
in this Hospital (Robt Rose) which was of the tertian
type of three months standing & was by the first ~~standing~~ bleeding made
a continued fever, but by the second the patient was cured in 8
days from the time of his admission. Venereal Intermittents, these
fevers are sometimes protracted a great length of time, Mr. Bruce
had a quartian 15 years, I have heard of it continuing 33 years
when it is thus protracted, this length of time the disease was
not properly ~~protracted~~ cured, for it is not by any means incurable
venereal Intermittents were formerly thought healthy but
℣ is necessary in them too. King James said that intermittent
in the spring was physick for a king. but in his old age he
died of one, being reminded of his saying upon his death he said
not for an old one but for the young. when they are mild
& the pulse Typhus, the fit is often prevented by Laudanum
& diluting drinks, ℣ if the pulse be tense ℣ and neutral
salts & bitter tea before the paroxism, bark before the sec-
ond & Laudanum, before the third, if the inflammatory sym-

Dr. Supposes it acts by its poisonous qualities.

tous be low & the pulse by Typhus, as mild as the intermittents gener-
ally are in the spring, it commonly assumes an Inflammatory appear-
ance in the fall at which time V.S is always proper, I have here found
it necessary to V.S & purge 3 or 4 times before the system was prepar-
ed for the bark, In intermittents of the mild kind just before the
paroxism, wine, Laudanum about 30 gutt, vinegar & pepper togeth-
er about a teaspoonful of the latter to half a pint of the former
dancing hot & cold bath, spirits sulphur in wine, Hyamonium
& nicotiana applied to the wrists, a ride on horse back, sweating
before the fire terror & electricity will sometimes be effectual
by acting on the predisponing debility. The remedies to prevent
the recurrence of the fit are first, Palliative as bitters of all kinds
astringents as allum & salts &c. Bitters & astringents combined
juice of spiders in bread or the web made into pills."—
Radical from ½ to 10 gr in substance or in solution, the tourniquet
applied around the thigh so as to accumulate the blood in the su-
perior part of the body, it prevents the chill & lessens the fever
But the peruvian bark is superior to any of these & stands unri-
valled in intermittents & whenever it fails it is in consequence
of inattention to the state of the system, or because the bark is
of a bad quality, or not aided by auxillaries, Emetics are some-
times given as preparatory to the bark, but purges are pre-

Attenis 16 of grain

ferable in discharging the bile & move effectually. It is not safe to give it in tincture unless greatly diluted & to those accustomed to spirits. Children may have a waistcoat quilted with the bark or it may be given in injections, sometimes the paroxism succeeding the first dose of bark is worse in consequence of it this is a good sign, It may be given with snakeroot orange peel &c. in order to may it more pallatable, The following causes may fail to make it cure, 1st. giving it in the inflammatory stage of the system 2d. In visceral obstruction of the liver spleen &c. 3 In an highly excitable state of the system, 4th. In an exhausted state of the system 4th. In an exhausted state of excitability 5th. If long use looing its effects thereby 6th. inducing costiveness or diarrhoea 7th. of its being of a bad quality — The remedies for the Inflammatory state of this fever are 1st purging low diet &c. & then the bark never fails For visceral obstructions the same with the addition of blisters these two states have always a sizy blood - In all intermittents that are protracted the disease is kept up by congestion or obstructions for these 1st and mercury are necessary, decoction or infusion is often necessary & effectual when the powders fail, this is owing to the accumulation of the excitability, Bitters cure when bark fails & for the same cause

Recollect that I mentioned formerly that the willow bark cured when the peruvian failed. When excitability is nearly gone large doses of the bark as 4 to 6 oz a day with ginger, cloves flores martiales &c. it is very powerfully when given with Iron the lancet should not be forgotten in chronic cases, after large use of the bark lay it aside and give & give other tonics bitters a day or two, if it induce costiveness join with it a little rhei, if diarrhoea a little Laudanum.

If after all this it fails suspect it to be bad & get better after the cure a few doses of bark should be given about the full & change of the moon, Blisters when applied to the wrist are often of the most evident advantage in obstinate intermittents, Lying in bed & fasting on the day of the expected paroxism will often prevent it, if all these fail recourse must be had to a new climate, I once knew a man to be cured by going to sea, after bark, arsenic, &c &c had failed But we must recollect that medecines sometimes do not produce their good effect untill after they are discontinued. I cannot take leave of this subject without more previously of the discovery of that invaluable medecine the bark, 1st It was discovered by an Indian 2d Introduced into use by a priest. ——

3d. Revived by regular bred physicians, 4 revived by a quack & lastly ye 5th unpopular in France & Italy

Intermittents sometimes appear in disguised forms, 1st. in periodical head ache, tooth or ear ache, the remedies are Vs purging blisters & then the bark, the tooth if it be decayed should immediately be extracted 2d. in periodical convulsions, in children either as Lunatics or tertians 3d. In periodical vomits of bile, Bark should be given here, 4 In periodical dysentery here the bark should be used freely 5th. In periodical coma & dysentery & apoplexy, by Vs of blisters & then the bark 7th. eruptions upon the skin, 8th. In periodical gleet, 9th. In nictolopia or hen blindness or an inability to see after night &c. all these are known by occurring in the time of Intermittents 10 In dropsey 11 In periodical fever of the part of the body only, as in the arm &c. The consequences of these Ir cured intermittents are 1st. Pulmonary congestions cough & fever, they remedies are Vs purging Mercury low diet &c. 2d. obstructions of the Liver, spleen, omentum &c. These are the effects of such a weak stimuli, as are not sufficient to induce disease, or more frequently the consequence of want of sufficient depletion, Bark & steel are here proper 3d. Sore legs, swellings of the limbs, jaundice dropsy &c. Vs Mercury frictions 4th. Hectic fever, here salivation promises most

the next form of fever is the 2d

Hectic, This is often confounded with the Intermittent the hectic often occurs in Phthisis pulmonalis, it cause 1st ulcers as in the joints & 2d Schirrí or glandular Scrofulous tumors in the glandular parts of the body as in the Uterus &c. 3d obstructions in the Viscera as in the Liver &c. gall stones calculi &c. 4 sharp needles pins &c. recollect of a Lady being cured of hectic by a discharge of a pin from the vagina, 5th Leucorrhoea & Menorrhagia, 6th Poisons which have be called slow, 7th ordinary stimuli, rendered powerful in consequence of an increased excitability 8th atmosphere rendered impure in consequence of mercurial exhalations 9th Hamilton mentions its being induced by Nostalgia & pregnancy.

Hectic fevers differs from intermittents in the following ways 1st they are seldom regular longer than 3 or 4 paroxisms 2 sweats succeeding chills 3d the sweat give little or no relief for the fever continues after them & chills frequently appear during the sweat for 10 or 12 days at a time, 4th urine pale during the intermissions & turbid in the intervals 5 great pains resembling rheumatism, swelling without pain & sometimes the swelling suddenly disappears.

The hectic sometimes comes on suddenly, but generally

generally steals on gradually it being sometimes a month before the patient is aware of its approach, there is often a circumscribed spot on the cheek, or both, having no intermediate shade between them it & the colour of the face which establishes its character, People about 45 are more subject than at any other time of their life, the pulse varies very much in this disease, it seldom fails to give warning of its insidious design, The patient in the hectic seldom complains of pain in the head which is an almost universal symptom in intermittents, they sit & without any inconvenience, the arterial system is chiefly affected, women from 40 to 45 are often subject to the hectic from schirri & obstructions, wounds poisons Lucorrhoea &c may all give rise to it, the pulse is Synocha or Synochoid, Typhus or typhoid the cause of fever from these may be an unsuccessful attempt of nature to carry off the exciting cause. powerful stimuli acting asting on accumulated excitability. the remedies are the removal of tumors exciting causes &c as nausea for there may induce it, & when the pulse is synochus or synochoid & this must be particularly attended too, or when that cannot be used, Nitre and other feeble evacuents, Bark steel & the cold bark are the remedies generally recommended a with steel has been used to a great advantage

than there, but from the great nourishment it contains the propriety of giving it is very doubtful, I have used every tonic to no purpose, infusion of malt has been used to a greater advantage than these with Governor Sparks of S.C. was perfectly cured by an old woman by this infusion, the manner in which it is prepared is to take 3 or 4 spoonfuls of the sifted powder of malt to which add a quart of boiling water, 2 or 3 spoonfuls of sugar & a little wine, 2 or 3 quarts of it may be given daily drinking sediments & all, Arsenic has been recommended here? also digitalis bark bitters &c but they generally aggravate the symptoms of the disease unless the pulse be typhus, From all this it appears like the shirt of hercules it can only be shaken off by labour & exercise but sometimes it is out of the patient power to take this exercise from want of means, as improper weather &c are we then to desert them? may not some new action be created in the system? as by salivation? to prevent the chills from 20 to thirty drops of Laudanum are used with success in some cases it was the only medecine that checked the disease. The most valuable of all the remedies are riding on horseback, salivation hard labour & Laudanum. Hunter mention a case that amputating a dis-

-ing a diseased limb & which was the supposed cause, was it by the removal of the cause or by creating a new action that this cure was effected? I believe the latter.

Febricula comes next, It is common to the south in autumn & it is known by the name of the inward fever. the patient is neither sick nor well, his hands are hot, It is best known by a quick pulse, dry tongue, little headache & high coloured urine, It only requires the stimulus of a glass of wine to be thrown into an intermittent, The remedies are vomits, gentle purges & but above all blisters, bark & V.S are sometimes necessary, this is so common that few escape it. Critical days. — In spite of all these changes of climates critical days have continued for ages. — they were even noticed by hypocrates, all fevers have critical days which are more plain & distinct in uniform climates. Dr. Senec calls the tertian the primary form of fever & its critical days are on the 3, 5, 7, 9, 11th after which the quartian type is assumed & then the critical days are on the 14-17-20 & after the 20th on the 27-35 & 42 the Ty Fever generally terminates on the critical days of 3-5-7-9 &c. In consequence of extreme debility the crisis is sometimes observed upon the non critical

Dr Jackson informs us that of 60 cases of intermittent fever which terminated favourably, 10 terminated on the 3 day 10 on the 5th 20 4th on the 7th 10 on the 9th 5 on the 11th & 5 on the 17th day; of 9 that died, one on the 6th one on the 7th six on the 8th & one on the 10th all continued fevers are protracted tertians as it is evident from the exaculations on the 3 day the continued fevers are more violent on critical days when the remedies are bf &c which should be attended to the present mode of practice may derive some advantage from observing the critical days in continued fever where the remissions are not observed, the fever will be of the greatest force on the odd day & shews a centripetal tendency upon those days, then bf & purging should be given. If the paroxysm of fever be worse upon an even or a critical day the Physicians attention is so much the more necessary as the patient is then getting worse & the fever becoming more dangerous, It generally terminates in death on the 4th or 5 day when any doubt is entertained about giving bark & other stimulants give them on the non critical days, a very great advantage arises from attending to the critical days. — we may keep up the hopes of the Patient & thereby obtain his confidence, the critical days change in different seasons

In this place the yellow fever generally terminates in august on the 3d day in September on the 3 & 5th In october on the 5 & 7 & the latter in October the more protracted & this I suppose is more applicable to middle climates, Dr Balfour & Lind with some others say that fevers shew exacerbations, on the full & change of the moon & 3 days before & 3 after the change I believe in the effects of the moon in these cases & Dr Moseley says that fevers grow worse at such times in Jamaica. — From this we may learn to use 1st more powerful medecines at these two lunar periods 2d avoid more particularly all exciting causes at these periods, 3th to gaurd against relapses on those days 4th Not to give tonics about these periods.

Of the prognosis of Fever.

Or the sign which indicate the issue of fever in Life & death 1st the signs vary in different countries, in different seasons in the same country, in different people & ages & in different grades of the same fever, 2d There is great difference between the same grade of fever in Adults & children which arises from two different causes. —

1st Children are more tenacious of Life than adults hence they frequently recover after the black vomit & other fatal symtoms that adults have. —

2d. There is a great difference in different periods of Life, 3d. the same signs differ in meagre & robust habits, 4th. In particular state of the health in ancestors for a person from healthy ancestors will survive a more violent attack of fever than one from sickly ancestors. —

Signs of Life & death in general states of Fever.

1st. the violence, danger, & duration of fever may be predicted from a knowledge of the violence &c. of the remote causes, the predisponing the exciting do & the suddenness of the attack without premonitory symptoms, 2d. as the union or intimacy of the different parts of the symptom becomes broken the fever becomes more dangerous as in the hectic & less so the more general the fever is. In hectic the arterial system alone is affected & all the other systems are unaffected. We see it so in Spasms or convulsions where but one system is affected 3d. Paroxisms being worse on even than odds days, those fevers which creep on slowly are worse than those which come on suddenly, 4th. absence of appetite & chills unfavourable, but the coming on of the chill ~~before~~ b/ after is favourable, The sudden recovery of strength in unfavourable

Signs of Life and death are

1st. direct debility in the beginning of fever is not

alarming but at a close, is a sign of death appearing in tremors
&c. Lying constantly upon the back, sliding down in bed, a
disposition to faint, raising the eyes in bed, tremors of the
tongue, are all, unfavorable symptoms, 2d. absence of pain
dangerous in malignant fevers, but less so when the pulse
is tense & the patient says he is to well, return of pain after
depletion favourable, Long protracted pains are dangerous & more
so in vital parts than elsewhere, they waste excitability,
Pain returning after depletion & occupying external parts in
every state of fever favourable, as they shew a Centrifugal
tendency, 3d. partial heat or coldness if long continued
as cold wrists when the hands & fingers are warm is always
fatal, Cold feet & breath long protracted chillness a sense
of heat on the skin or in the stomach are all unfavora-
ble 4th. absence of, or an immoderate thirst is unfavora-
ble, sudden subsiding of these with a dry or black tongue
& thirst for uncommon drinks are all unfavourable
5th. the pulse being preternaturally slow (except in old
people) unfavourable more so in children. An Intermit-
ting pulse is dangerous, we sometimes meet with this
where there is no danger & where it continues from hab-
it in Convalescents. (I must however own that the

that the intermitting pulse is without danger in some in-stances / I once saw it attend the whole time of convalescence the danger is in proportion to the number of intermissions in a given time, when the pulsation is 120 the case is alarming & when as high as 180 few recover. I once saw the pulse 208 in hectic fever which proved fatal, 6th a white tongue is the sign of inflammation, a yellow one of bile, a red smooth tongue, a black & natural tongue are very dangerous in malignant fevers & generally fatal - if tongue be coming moist after being dry or becoming gradually moist, first from the edges & gradually spreading over the whole is favourable, a hot tongue dangerous, but a cold one fatal. Sores on the tongue & lips are generally safe and favourable, but always fatal when on the fauces tonsils & throat. take care that you are not deceived by matters foreign to the disease as chewing tobacco, when that appetite remains, port wine, liquorice, jellies &c. or a dry tongue made so by sleeping with the mouth open or moist by drinks or by art, 7th Eyes 1/2 open fatal in every case in adults except in dysentery, one eye larger than the other or a contracted or dilated pupil, muddiness

glassiness & continued motion & writhing of the eyes, squinting blindness, false or double vision catching at imaginary objects matter formed at the inner corner of the eye, involuntary tears, a film going & coming off the Cornea are all unfavourable, The pupil of the eye becoming white clearer & lighter is favourable.

8th Deafness favourable in mild but the reverse in malignant diseases. Tinnus Aurium, pain from slight motion a revival or extension of the sense of hearing, after deafness all unfavourable, 9th Insensation, insensibility to cold Blisters &c. unfavourable, sudden restoration of sensibility to cold pain &c. fatal, Great pain attending the touch of blisters in mild fevers very favourable It is favourable if the patient asks you how he is, before you put that question to him & more so if he asks you about your own state of health, Gaping sneezing picking the nose are favourable, they show the return of sensibility, return of old pains in former diseases & looking round quickly are favourable. An exception to this occurs in asthma, 10 Hollow eyes contracted skin on the forehead, a frown, a resemblance of ancestors, the Hippocratic countenance & one naturally placid.

Dr. Rush accounts for the rattles in this way
the patient has not power to expectorate the mucus in
his throat ——

are all unfavorable, The feverish countenance is favorable as the flush, but not the livid colour of the nails, expansion of the cheeks unfavourable, Asthma, will sometimes shew the most of these symptoms of death & not be dangerous 11th. Respiration sometimes slow & sometimes quick, expansion of the ala nasi, a hollowing moaning occurring when awake, but worse in sleep, cold breath & the rattles in adults are fatal, 12th a quick sharp unnatural voice paraphonia palatina aphonia more so, but I have seen recoveries from them 13th. Lying on the sides after lying on the back always favourable 14th. old sores returning, eruptions about the mouth spontaneous salivation & sweats are favourable, The priapism is generally favourable but in 93 it preceded death in one case, Dr. Haller relates a case in which it continued two hours after death, Mahamed died with this symptom, viscid matter adhering to the teeth gnashing them, convulsions, tremors &c are fatal, also hiccup in malignant fevers, but not in mild, 15 a return of appetite for food, tobacco, coffee &c are favourable 16 obstinate costiveness from defective secretion, the discharge of fæces without noise are all unfavorable

but when discharged with noise it shews, command of the sphincter and this the Dr learned from an old woman.
green & black stools are favourable in bilious fevers stools are healthy when they are bene odorata & bene colorata. Worms when discharged alive by the anus favourable but not by the mouth; when discharged in the beginning mixed with slime & alive favourable, but when discharged dead &c. & in the close of fever unfavourable, 17th vomiting unfavourable, bloody urine suppression, pale high coloured or coffee coloured do are all alarming. Milky urine denotes a disease of long continuance, when it is favourable it is cloudy, because it shews the sign of a crisis. Gravelly matter adhering to the sides of the pot is favourable this gravelly matter in calculus falls to the bottom & in fevers sticks to the sides of the pot, Sweats in mild fevers are universally favourable, but if partial are not so, an acid putrid cadaverous smell or taste of the sweat generally unfavourable. & generally fatal.
I have known a recovery after this nador, rather than sudor in fevers. abscesses & glandular swellings favourable, Cold sweats unfavourable.

I come now to the signs of Life & death as they re-

gard the mind. ——

Apathy unfavourable. a silent delerium more alarming than a talkative one, if this last symtom occurs after being suspended it is favourable, but if they continue throughout the disease this last inference cannot be made. Good temper is favourable & enquiring after news, the hour of the day or night a disposition to be removed or to change rooms are all favourable. Want of solicitude & friendship for the family & relations unfavourable, but their return after being suspended is favourable, Sudden cures are seldom wanting especially in chronic cases, all these symtoms may deceive us with a few exceptions, I have seen recoveries from the most unfavourable symtoms & vice versa, A physicians should never forsake his patient what ever may be the signs, nor should he give a prognostic unless pressed, but let him say that worst those have been worse have recovered & those of better symtoms have died. If pressed positively to say let the prognostic be unfavourable, that if the patient should recover he may be thought wiser than himself & his skill more esteemed than his judgment admired. ——

Having now Gentlemen spoken of the prima-ry

" Morbus

forms of fever, I must next observe that there are six forms of fever more strongly dependant upon the arterial system than any other viz the Yellow Fever, the Inflammatory, bilious, mild bilious, Intermittent, Remittent, & Febricula, also four more particularly connected with the alimentary canal namely the, Dysentery, Cholera, Cholic & Diarrhoea there you will do well to remember, we will now proceed to deliver a few remarks upon the cause symptoms & cure of those states of general fever, which are known by the name of the yellow & bilious fever, Plague, Jail fever, the fever from Opium & the bite of rabid animals.

1st. bilious states of Fever.

I shall only say a few words about the forms of fever, because so many writers have spoken of them, the best of which are Cleghorn, Hillary, Jackson, Clarke, Dr. J. Hunter & senac 1st. of the mild Bilious, this assumes as many forms as the yellow fever & the cure is the same, the pulse is moderately Synochus & the blood seldom sizzy, the remedies are 1st. V.S. when the pulse is active, 2d. Purges as Salts, Cremor tartar, Manna Senna & sometimes Calomel, 3d. gentle vomit, 4th. diluting as cold water, 5th. Blisters after the 3 or 4 day to the wrists & after it has assumed an Intermittent type.

the bark is a specific, when the bark is rejected, Chamomile tea Columbo, Lupulin Gentian &c. may be used with great advantage Salivation is seldom necessary in this form of fever, but sometimes necessary to prevent relapses, the sooner this fever comes on in the fall the more general it will be. 2d. dry air produces inflammatory & remitting fevers most do. Intermittent & bilious fevers, these forms frequently changes to a grade yet may between a mild & yellow fever, I have called it the Inflammatory remittent & have described under the name of Breck bone fevers in my Inquiries.

These fevers still assumed a more malignant form in 1793 which was the yellow fever (for an account of which I refer to my 3d & 4 Vol of my Inquiries) also to Hillary, Morely, Lives museum &c. you are not to expect to find the account of the symptoms & similar in all for it appears sometimes in the forms of Synocha, Dysentery, Palsy, Apoplexy, different kind of convulsions Colics, &c. In the form of Intermittents when it kills as certainly as when it does not intermit, it frequently terminates upon the 5 & 7 day. It frequently appears in the form of Chronic, Inflammatory chronic typhoid &c. & in Febriculas in a dumb form in which the muscles preserve their excitement, walking even just before death. in the form of mi

general yellowness, which is not dangerous, fainting or a disposition to faint upon being moved, sweats coldness, petechia on the skin &c. It generally occurs in the middle of August. The pulse not slow, not active at sometimes & the reverse at others, a natural tongue with great heat upon the skin are dangerous symptoms, a person died of pain in the toe & upon being opened shewed evident signs of Inflammation in the stomach, The exciting causes of this are running swimming, vomiting by eating mushrooms, sleeping in a damp place fractured leg, relinquishment of former occupations, these are what I have collected in this City especially in 1793 at which the system was like a florence flask. In consequence of the brain having white serum in it ventricles & there being great marks of Inflammation in the stomach, when no vomiting takes place it is supposed that the black vomit does not take place till after the death of the stomach. ———

The remedies for vomiting are 1st, Chammile tea milk or milk & lime water of each equal parts, this has allayed a vomiting where every thing else had failed. sweet oil, Urin milk & molasses, alkaline salts, oatmeal roasted & tea made of it, Sp turpentine 10 drops in sweet

or Molasses, sacch alb, tinct Opii 30 gutt aqua mentha IV made into a Julep has been highly recommended, total abstinence by it the stomach puts itself as it were in a good humor blisters to the pit of the stomach, wrist or ankles, milk & lime water injected into the anus, large doses of Opium, by the mouth & rectum, Cayenne pepper, for Diarrhœa, testaceous powders & resini & a few drops Laudanum &c. For a pain in the head ice in bladders or cold water to it, injection of cold water for a pain in the bowels, in the stomach gentle frications of sweet oil & Laudanum, for Coma, cupping, blisters or a plaister of mustard all over the head.

2d. the Plague. this is an offspring of Miasma, the symptoms differ from different causes, as habit custom, climate &c. there is no form of yellow fever in which the plague appears does not, it appears in all the 13 primary forms of fever - It is not only altered by climate &c. but by diet dress manners religion &c. It prevails in no part where there is no animal & vegitable putrifactions. It is not specifically contagious it appears in dysentery & mania, It never was nor never will be exported from one country to another It ceases as the intercourse between nations increase the causes which frequent it here are 1st the high culti

vated state of the country 2d. the great consumption of vegi-
tables 3d. better accommodations 4th. cleanliness, it is kept
up in Egypt, by the opposite causes. It is checked by cold
& hot weather rain &c. like the yellow fever, it appears af-
ter the recess of the nile & goes off about the middle of June
the remedies are the this is sometimes usefull tho' the system
is generally prostrated as not to admit of depletion, sweat-
ing purging & vomiting &c. Opium salivation is too slow to
do good, the plague generally terminates in the sore throat
& mouth, Diarrhoea, Influenza, Gonorrhoea, &c.
(see Websters medical reports)
3d. Jail fever, this is sometimes attended 1st. with so
great a degree of morbid action as to require 2 or 3 bleed-
ings more when the complaint is attended with obstruc-
tions 2d. it sometimes appears in chronic or acute dysen-
tery 3d. It is attended occasionally with Inguinal swel-
lings which have been mistaken for Bubloes, I should have
been deceived when I was surgeon in our late army had it
not been for Monroe which I kept continually by me-
4th. It spreads by excreted matter & cold weather approa-
ching a warm climate drives it off entirely Dr. Hunter
informed me that the soldiers never had it when they

in the open air. 5th It is sometimes communicated by one in whom it is dormant, this may be believed by the following circumstance, I knew a case of a man who was never affected by handling a poisonous vine, but his wife felt the effects of it though he did not touch it, 6th this fever may be shunned by avoiding all the predisposing & exciting causes just mentioned, It may be cured by accommodating the remedies to the different states of the system, when the pulse is Synocha, Synochus, synochula or synochoid. ———

We will next speak of

4th Fever induced by Opium this is truly a malignant state of fever, the remedies are v/ when the pulse is active or much depressed, Emetics, when all others fail a feather may have some effect, indeed tickling the throat with a feather is the most successfull in the first instance the larynx may be retentive of its sensibility when that of the stomach is lost, 3d Cold applications to the stomach when there is much febrile heat, 4th Cordials after depletion the best of which are Ardent Sp Ether, 5 stimulating injections & cataplisms to the feet & hands, 6th Flaggelation

5th Fevers produced by the bite of a

Rabid animal (for a full account of these refer you to my Inquiries)

6th Fevers produced by

Poisons. There are three kinds of poison the animal vegetable & mineral, the remedies for these are 1st such as act by the mouth or bowels, 2d such as destroy the effect of the poison by forming a mixture, & 3d such as destroy the effects of the poison by forming a new a less dangerous action, the first are vomits which may be excited with a finger feather &c. White vitriol is the quickest in its operations Tartar may be used when other Medecines fail, in the dose of about 6gr. To discharge from the bowels, purges of sweet oil & milk & water diluting drinks &c. to give those of the 2d head such should be given as would make a neutral mixture, The remedies under the 3d head which are to cured by creating a new but less dangerous action. The cures that have been made show us that we never should desert our Patients in this disease, when these remedies fail excite an action on the skin, recollect the dog cured of Nux Vomica by Flaggellation. ——

& the two cures given by Darwin by Flaggellation. —

When the fever is slow treat it as fevers from other causes

Sweating has been attempted as proper, if the poison shews a tendency to pass off this way sweating should be used, for this Serpentaria Seneka &c but if they cannot be procured readily the Vol Alkali, should be used. Morely says that an action excited in the stomach acts in the same way as a cure when the poison has been taken by the skin, as an irritation excited on the skin, does when the poison has been inwardly taken, Sometimes the poison acts primarily on the skin inducing erosipelatous inflammation & morbid Crct in the Blood Vessels. ——

We shall now consider certain states as they occur in Malignant fevers, the worst form of Malignt fever is excited by the bite of a rattle snake, to this state of fever the remedies must be accommodated. ——

There are —

1st The sweating state of Fever. This occurs in many diseases as Pleurisy consumption &c. it may be either with strong or weak morbid action, that in strong occurs in the waking state, in the Yellow Fever, Pleurisy, Intermittent fever, &c. & it may be called the tonic sweat that with weak occurs in the sleeping state. ——

In the Plague & Petic fever & it may be called the atonic sweat, they are fœtid yellow, Green, Acrid &c.
In cases of great morbid excitement where the sweating stat comes on ℞ wou'd be proper, sitting up in bed &c. In weak morbid action the remedies are Elixir vitriol Bark &c. & sometimes in the typhoid state of fever a small ℞ nitre fomentent sweats.

2d The fainting state, This occurs in all those fevers of a violent & malignant form, the remedies are small ℞ Cinetics &c. the patient will perhaps faint after 1.2 or 3 ℞ & not afterwards.

3d The burning state, this has been called Causa, but it is rather the consequence of disease, it is the calor mordens, the blood when trickling down the arm is burning to the patient. It is a symtom of Malignant fever, I have know the heat to be very great when the pulse was scarcely perceptable, hence we may determin that heat is not proportioned to the violence of the circulation of the blood, the remedies are ℞ Purging & cold applications.

4th the cold & chilly state this is often protracted for several days, is sometimes partial & some

times general, the remedies are ℞ &c. this has often removed the cold from the feet & after bleeding friction is an useful remedy.

5th The Petechial. this is the Malignant form suffocated upon the skin & the system is generally prostrated when the petechia appears. These petechia are to the malignant fevers, what the prickly heat is to the mild bilious, the remedies are those used in the prostration of the system. the next form of fever is the

Intestinal in which are included Cholic Diarrhoea, Dysentery & cholera Morbus & first of-

Diarrhoea, here I shall confine myself to the acute & not the chronic, this occurs more in the season in which cold nights succeeds hot days. this is a check to the perspiration determining it to the bowels, also in moist weather. It is occasioned by eating unripe fruit & that in large quantities, by large quantities of fresh meat after being accustomed to salt meat, putrid &c. the remedies are frequent purges, diluting drinks after which Laudanum internally about 40 gutt injected with ℥IV of flaxseed tea into the rectum & Cretaceous mixture it is made in the following manner.

Creta ppt ℥iii pulv gum arabic ℥iii sacch alb ℥ss
Laudanum ℥i. Ol Cin gutt xii aqua fontan ℥viii
a table spoonfull to be given every 2 or 3 hours —

Dysentery, this is a higher grade of diarrhoea it is to diarrhoea as Gout is to Rheumatism or Consumption to catarrh. the discharge of mucus alone from the bowels in dysentery may be called a Gonorrhea of the bowels, as the dysentery is often preceded by diarrhoea so it often goes off in that form. Bad wheat has induced it, sour wine, & human effluvia have produced it. It sometimes comes on as the diarrhoea with fæcal discharges, but more frequently by costiveness & no discharge of bile, the patient is attended with great pain & inclination to stool, the perspiration is generally stopt the discharge is sometimes mucus without blood & vice versa, the pulse is sometimes quick & at others active, the pain in the bowels is sometimes up to the point of the sternum & at others low down in the rectum & sometimes in the whole canal. It is sometimes general in the Intestines & no pain at all, a membrane is sometimes discharged with the coagulating lymph formed into a membrane by Inflammation —

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